

### Personal Systems Reference Lenovo® ThinkPad® TopSeller™ Notebooks

January 2011 - Version 391







PC3-8500 DDR3 Low-Halogen SODIMM 1GB 55Y3706 2GB 55Y3707



ThinkPad Mini Dock Plus Series 3 433810U



USB 2.0 Portable Secure Hard Disk 160GB 43R2018 320GB 43R2019



ThinkPad Bluetooth Laser Mouse 41U5008



Lenovo® Power Hub 57Y4600



90W Ultraslim AC/DC Combo Adapter 41R4493

# ThinkPad<sub>®</sub>



Lenovo® ThinkPad L412



Lenovo ThinkPad L412 with ThinkPad Battery 55++ (9-cell) 57Y4186



Lenovo ThinkPad L412



Lenovo ThinkPad L412



Lenovo ThinkPad L412



Lenovo ThinkPad L412

Type-model	Processor	GHz	Max turbo (GHz)	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Finger print reader	Blue- tooth	Preload	Avail date
4403-33U	i3-350M	2.26		2GB	14.0" HD	2.0M	160G 7200	Intel 6200 <sup>28</sup>	WWAN upg	None		Blue	Pro 64	May 10
4403-34U	i5-520M	2.40	2.93	2GB	14.0" HD	2.0M	320G 7200	Intel 6200	WWAN upg	None	Finger	Blue	Pro 64	May 10
4403-69U	i3-370M	2.40		2GB	14.0" HD	2.0M	160G 7200	Intel 6200	WWAN upg	None		Blue	Pro 64	Jul 10
ı 4403-75U	i5-480M	2.66	2.93	2GB	14.0" HD	2.0M	320G 7200	11b/g/n	WWAN upg	None			Pro 64	Jan 11

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Mainstream business performance; two spindles Intel® Core™ i3 processor i3-350M or i3-370M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache or Intel Core i5 processor i5-480M or i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> Genuine Windows® 7 Professional 64  Preloaded applications¹⁴ (only some listed) Rescue and Recovery™
Memory SATA DVD±RW	2GB std / 8GB max <sup>7</sup> / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in one socket; one socket available DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in	Access Connections™     Password Manager     ThinkVantage Power Manager     ThinkVantage System Update     Fingerprint Software (fingerprint
SATA disk	<b>160GB</b> <sup>8</sup> (7200 rpm) or <b>320GB</b> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	models)  ThinkVantage Toolbox
Widescreen display Camera	14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	<ul> <li>Microsoft Office 2010 preloaded; purchase product key to activate</li> <li>Corel® WinDVD® (DVD±RW)</li> <li>Corel Burn.Now™ Lenovo Edition</li> </ul>
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display;  Maximum external resolution: 2560x1600 (DisplayPort) @ 60Hz;	(DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW)
Keyboard	2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)  6-row, ThinkVantage button, spill-resistant, multimedia Fn keys	Supports ThinkVantage® technologies
TrackPoint® Touch pad ThinkLight™	TrackPoint® pointing device, Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch None	65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant
Dimensions <sup>3</sup> Weight <sup>2</sup> Case color Case material Battery - type	14.0W" (WxDxH): 13.5" x 9.2" x 1.26–1.42"; 344mm x 233mm x 32–36mm 4-cell: from 4.92 lb (2.23kg); 6-cell: from 5.11 lb (2.32kg); 9-cell: from 5.45 lb (2.47kg) black Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell	International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup> via 800-426-7378
Battery - life <sup>10</sup> Chipset	4-cell: up to 2.8 hr; 6-cell: up to 5.0 hr; 9-cell: up to 8.1 hr  Mobile Intel HM55 Express Chipset	ThinkPlus <sup>TM, 22</sup> 1-year LOR <sup>24</sup> 9x5 NBD 45K5968
ExpressCard/34	One slot (ExpressCard/34)	ThinkPlus 2-year LOR 9x5 NBD 45K5969
Ports	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor <sup>11</sup> (VGA DB-15, DisplayPort), ethernet (RJ-45)	ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD
PCIe Mini Card 11b/g/n Intel 6200 <sup>28</sup> WWAN upg	Two PCI Express Mini Card slots  Some: 11b/g/n wireless <sup>4</sup> , ThinkPad 11b/g/n, PCIe Half Mini Card  Some: 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2  Wireless WAN upgradable	ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot
Modem Bluetooth™ Ethernet	None Some: Bluetooth 2.1 wireless, LED indicator Realtek® RTL8111DL Gigabit Network Connection	45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972
Intel AMT Audio support	None High Definition (HD) Audio, Realtek ALC269Q codec / stereo speakers, 1.5 watt x 2 / volume up, down, mute buttons / digital mic, mic mute button, combo audio/mic jack	ThinkPlus 4-year P&L P/U Depot 45K5974
Security Security chip	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant	ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance
	r Some: UPEK fingerprint reader on palm rest, swipe sensor, supports the security chip <sup>2</sup> <b>1-year</b> - depot repair service / service upgrades <sup>22</sup> available	agreements at lenovo.com/thinkplus/warranty
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Type-model	Processor		Max turbo (GHz)		Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue- tooth	Bat- tery cells	Preload	Avail date
4404-32U	i3-350M	2.26		2GB	14.0" HD	2.0M	160G 7200	11b/g/n	WWAN upg		Blue	6	Pro 64	May 10
4404-33U	i5-520M	2.40	2.93	2GB	14.0" HD	2.0M	160G 7200	Intel 6200 <sup>28</sup>	WWAN upg		Blue	6	Pro 64	May 10
4404-34U	i5-520M	2.40	2.93	2GB	14.0" HD	2.0M	320G 7200	Intel 6200	WWAN upg		Blue	6	Pro 64	May 10
4404-35U	i5-540M	2.53	3.06	2GB	14.0" HD	2.0M	320G 7200	Intel 6200	WWAN upg	Finger	Blue	6	Pro 64	May 10
≆ 4404-4LU	i3-370M	2.40		2GB	14.0" HD	2.0M	160G 7200	Intel 6200	WWAN upg	•	Blue	6	Pro 64	Jul 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These models have a depot repair service 3-year limited warranty
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Mainstream business performance; two spindles Intel® Core™ i3 processor i3-350M or i3-370M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache or Intel Core i5 processor i5-520M or i5-540M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Genuine Windows <sup>®</sup> 7 Professional 64 Preloaded applications <sup>14</sup> (only some listed) • Rescue and Recovery <sup>™</sup> • Access Connections <sup>™</sup>
Memory	<b>2GB</b> std / 8GB max <sup>7</sup> / PC3-10600 1333MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	Access Conflections:     Password Manager     ThinkVantage Power Manager     ThinkVantage System Update
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in <b>160GB</b> <sup>8</sup> (7200 rpm) or <b>320GB</b> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	Fingerprint Software (fingerprint models)     ThinkVantage Toolbox
Widescreen display Camera	14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	<ul> <li>Adobe® Reader®</li> <li>Skype™ for Windows</li> <li>Microsoft Office 2010 preloaded; purchase product key to activate</li> </ul>
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display;  Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	Corel® WinDVD® (DVD±RW)     Corel Burn.Now™ Lenovo Edition (DVD±RW)     Corel DVD MovieFactory® Lenovo Edition (DVD±RW)
Keyboard TrackPoint® Touch pad ThinkLight™	6-row, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch None	
Dimensions <sup>3</sup> Weight <sup>2</sup>	14.0W" (WxDxH): 13.5" x 9.2" x 1.26–1.42"; 344mm x 233mm x 32–36mm 4-cell: from 4.92 lb (2.23kg); 6-cell: from 5.11 lb (2.32kg); 9-cell: from 5.45 lb (2.47kg)	
Case color Case material	black Acrylonitrile-Butadiene-Styrene (ABS) plastic	Supports ThinkVantage® technologies
Battery - type Battery - life <sup>10</sup>	Lithium Ion <b>6-cell</b> 4-cell: up to 2.8 hr; 6-cell: up to 5.0 hr; 9-cell: up to 8.1 hr	65-watt AC adapter EPEAT™ Gold rating
Chipset ExpressCard/34 Multicard Reader Ports	Mobile Intel HM55 Express Chipset One slot (ExpressCard/34) 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor <sup>11</sup> (VGA DB-15, DisplayPort), ethernet (RJ-45)	ENERGY STAR® 5.Ō-compliant RoHS-compliant International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup>
PCIe Mini Card 11b/g/n Intel 6200 <sup>28</sup> WWAN upg Modem	Two PCI Express Mini Card slots Some: 11b/g/n wireless <sup>4</sup> , ThinkPad 11b/g/n, PCIe Half Mini Card Some: 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable None	via 800-426-7378  ThinkPlus <sup>TM. 22</sup> 3-year LOR <sup>24</sup> 9x5 NBD 45K6021  ThinkPlus 4-year LOR 9x5 NBD 45K6022
Bluetooth™ Ethernet	Bluetooth 2.1 wireless, LED indicator Realtek® RTL8111DL Gigabit Network Connection	ThinkPlus 5-year LOR 9x5 NBD 45K6024
Intel AMT Audio support	None High Definition (HD) Audio, Realtek ALC269Q codec / stereo speakers, 1.5 watt x 2 /	ThinkPlus 4-year P&L P/U Depot 45K6023
Security Security chip Fingerprint reader	volume up, down, mute buttons / digital mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant r Some: UPEK fingerprint reader on palm rest, swipe sensor, supports the security chip	ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at
Limited warranty <sup>12</sup>	<sup>2</sup> 3-years/1-yr battery - depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty

Type-model	Processor	GHz	Max turbo (GHz)	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Finger print reader	Blue- tooth	Preload	Avail date
4403-58U	i5-520M	2.40	2.93	2GB	14.0" HD	2.0M	160G 7200	Intel 6200 <sup>28</sup>	WWAN upg	None	None	Blue	Pro 64	Jun 10

- This small and medium business (SMB) model is part of the US TopSeller™ Program
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Positioning Processor	Mainstream business performance; two spindles Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Genuine Windows <sup>®</sup> 7 Professional 64 Preloaded applications <sup>14</sup> (only some
Memory	<b>2GB</b> std / 8GB max <sup>7</sup> / PC3-10600 1333MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	isted)  Rescue and Recovery™  Access Connections™
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in <b>160GB</b> <sup>8</sup> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	Password Manager     ThinkVantage Power Manager     ThinkVantage Toolbox
Widescreen display Camera	14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	Microsoft Office 2010 preloaded; purchase product key to activate     Corel® WinDVD® (DVD±RW)     Corel Burn.Now™ Lenovo Edition
Discrete graphics	ATI™ Mobility Radeon™ HD 5145 graphics, 512MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display;	(DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW)
	Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	Supports ThinkVantage® technologies
Keyboard TrackPoint® Touch pad ThinkLight™	6-row, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch None	90-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹ <sup>7</sup>
Dimensions <sup>3</sup> Weight <sup>2</sup> Case color Case material	14.0W" (WxDxH): 13.5" x 9.2" x 1.26–1.42"; 344mm x 233mm x 32–36mm 4-cell: from 5.09 lb (2.31kg); 6-cell: from 5.28 lb (2.40kg); 9-cell: from 5.62 lb (2.55kg) black Acrylonitrile-Butadiene-Styrene (ABS) plastic	24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup> via 800-426-7378
Battery - type Battery - life <sup>10</sup>	Lithium Ion <b>9-cell</b> 4-cell: up to 2.5 hr; 6-cell: up to 4.5 hr; 9-cell: up to 7.4 hr	ThinkPlus™.22 1-year LOR24 9x5 NBD 45K5968
Chipset ExpressCard/34	Mobile Intel HM55 Express Chipset One slot (ExpressCard/34)	ThinkPlus 2-year LOR 9x5 NBD 45K5969
	Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor <sup>11</sup> (VGA DB-15, DisplayPort), ethernet (RJ-45)	ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD
PCIe Mini Card Intel 6200 <sup>28</sup> WWAN upg	Two PCI Express Mini Card slots 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable	45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot
Modem Bluetooth™ Ethernet	None Bluetooth 2.1 wireless, LED indicator Realtek® RTL8111DL Gigabit Network Connection	ThinkPlus 2-year P&L P/U Depot  45K5971  ThinkPlus 3-year P&L P/U Depot  45K5972
Intel AMT Audio support	None High Definition (HD) Audio, Realtek ALC269Q codec / stereo speakers, 1.5 watt x 2 /	ThinkPlus 4-year P&L P/U Depot 45K5974
Security Security chip Fingerprint reade	volume up, down, mute buttons / digital mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant	ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance
	<sup>2</sup> <b>1-year</b> - depot repair service / service upgrades <sup>22</sup> available	agreements at lenovo.com/thinkplus/warranty
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See footnotes for important warranty information US model announced June 22, 2010

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Type-model	Processor		Max turbo (GHz)	Memory	Wide- screen display	Camera	Disk SATA GB <sup>8</sup> rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Finger print reader		Bat- tery cells	Preload	Avail date
4404-3GU	i3-370M	2.40		2GB	14.0" HD	2.0M	160G 7200	Intel 6200 <sup>28</sup>	WWAN upg		Finger	Blue	9	Pro 64	Jun 10
4404-3HU	i3-370M	2.40		2GB	14.0" HD	2.0M	320G 7200	Intel 6200	Gobi 2000	AT&T <sup>23</sup>	_	Blue	9	Pro 64	Jun 10
4404-3JU	i5-520M	2.40	2.93	2GB	14.0" HD	2.0M	320G 7200	Intel 6200	WWAN upg		Finger	Blue	9	Pro 64	Jun 10
4404-3KU	i3-350M	2.26		2GB	14.0" HD	2.0M	160G 7200	Intel 6200	WWAN upg			Blue	9	Pro 64	Jun 10
4404-3LU	i5-520M	2.40	2.93	2GB	14.0" HD	2.0M	320G 7200	Intel 6200	WWAN upg			Blue	9	Pro 64	Jun 10

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   These models have a depot repair service 3-year limited warranty
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Mainstream business performance; two spindles Intel® Core™ i3 processor i3-350M or i3-370M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache or Intel Core i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> Genuine Windows <sup>®</sup> 7 Professional 64  Preloaded applications <sup>14</sup> (only some listed) Rescue and Recovery <sup>TM</sup> Prescue Connection TM  Prescue Connection
Memory	<b>2GB</b> std / 8GB max <sup>7</sup> / PC3-10600 1333MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	Access Connections <sup>TM</sup> Password Manager     ThinkVantage Power Manager     ThinkVantage System Update
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in <b>160GB</b> <sup>8</sup> (7200 rpm) or <b>320GB</b> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System <sup>TM</sup>	Fingerprint Software (fingerprint models)     ThinkVantage Toolbox
Widescreen display Camera	14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	Norton™ Internet Security 2011 (30 days of virus definitions)     Adobe® Reader®     Adobe Flash® Player
Discrete graphics	ATI™ Mobility Radeon™ HD 5145 graphics, 512MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	Skype™ for Windows     Windows Live™ Toolbar     Microsoft Office 2010 preloaded; purchase product key to activate     Microsoft Research AutoCollage Touch
Keyboard TrackPoint® Touch pad ThinkLight™	6-row, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch None	Corel® WinDVD® (DVD±RW)     Corel Burn.Now™ Lenovo Edition (DVD±RW)     Corel DVD MovieFactory®     Corel DVD MovieFactory®
Dimensions <sup>3</sup> Weight <sup>2</sup> Case color Case material Battery - type Battery - life <sup>10</sup>	14.0W" (WxDxH): 13.5" x 9.2" x 1.26–1.42"; 344mm x 233mm x 32–36mm 4-cell: from 5.09 lb (2.31kg); 6-cell: from 5.28 lb (2.40kg); 9-cell: from 5.62 lb (2.55kg) black Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 9-cell 4-cell: up to 2.5 hr; 6-cell: up to 4.5 hr; 9-cell: up to 7.4 hr	Lenovo Edition (DVD±RW)  Supports ThinkVantage® technologies
Chipset ExpressCard/34	Mobile Intel HM55 Express Chipset One slot (ExpressCard/34) 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor <sup>11</sup> (VGA DB-15, DisplayPort), ethernet (RJ-45)	90-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service <sup>17</sup>
PCIe Mini Card Intel 6200 <sup>28</sup> WWAN upg	Two PCI Express Mini Card slots 11a/b/g/n wireless <sup>4</sup> , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Some: Wireless WAN upgradable	24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup> via 800-426-7378
Gobi™ 2000 Carrier Modem Bluetooth™ Ethernet	Some: Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider Some: AT&T®, contract required with service provider None Bluetooth 2.1 wireless, LED indicator Realtek® RTL8111DL Gigabit Network Connection	ThinkPlus™.22 3-year LOR24 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024
Intel AMT Audio support  Security Security chip Fingerprint reade	None High Definition (HD) Audio, Realtek ALC269Q codec / stereo speakers, 1.5 watt x 2 / volume up, down, mute buttons / digital mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant r Some: UPEK fingerprint reader on palm rest, swipe sensor, supports the security chip	ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at
Limited warranty <sup>12</sup>	<sup>2</sup> 3-years/1-yr battery - depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty

#### ThinkPad® L412 Accessories

Memory 1GB PC3-10600 DDR3 L-H SODIMM 1GB PC3-10600 DDR3 L-H SODIMM (25Pack) 2GB PC3-10600 DDR3 L-H SODIMM 2GB PC3-10600 DDR3 L-H SODIMM (25Pack) 4GB PC3-10600 DDR3 L-H SODIMM	55Y3710 ann 03/02/10	Batteries ThinkPad Battery 55+ (6-cell) ThinkPad Battery 55++ (9-cell) ThinkPad External Battery Charger <sup>44</sup> 44 Requires the <i>ThinkPad 90W AC Adapter</i> 40Y7659 or the adapter provided with the	system.
Storage and removable storage		More information at www.lenovo.com/allda	ycomputing
SL410/510 500GB Disk SATA 3G/s (5400 rpm)	43N3422 ann 10/22/09	ThinkPad 65W AC Adapter <sup>45</sup>	40Y7696 ann 01/05/06
USB 2.0 Portable 500GB Hard Disk USB 2.0 Portable Secure 160GB Hard Disk USB 2.0 Portable Secure 320GB Hard Disk	45K1690 ann 05/26/09 43R2018 ann 11/18/08 43R2019 ann 11/18/08	<sup>45</sup> Only compatible with the integrated graph ThinkPad 90W AC Adapter Lenovo Power Hub 90W Ultraslim AC/DC Combo Adapter	40Y7659 ann 09/20/05 57Y4600 ann 09/07/10
eSATA/USB 2.0 Secure 500GB Hard Drive USB 2.0 Portable DVD Burner	57Y4400 ann 01/07/10 43N3264 ann 01/05/10	More info at www.lenovo.com/support/pov	41R4493 <i>ann 09/22/09</i>
	43N3204 ann 01/03/10	Charging tips for 90W Ultraslim AC/DC Com	
Wireless WAN (Mini PCI Express)  Only WWAN upgradable models:  ThinkPad Gobi™ 2000 Broadband Option	78Y1399 ann 01/07/10	•iPod and iPhone Charge Tip (L10a) •Generic Micro USB charge tip (L18)	41R4481 <i>ann 12/18/07</i> 41R4490 <i>ann 01/06/09</i>
ThinkPad AT&T® Gobi 2000 Broadband Option		More information at www.lenovopowertips	.com
ThinkPad Expansion		Carrying Cases	
Lenovo® Essential Notebook Stand	45J9292 ann 05/12/09	Up to 14" widescreen models: ThinkPad 14W Case Sleeve	57V4904 app 02/16/10
USB Port Replicator with Digital Video ThinkPad Port Replicator Series 3	45K1610 ann 07/28/09 433610W ann 06/23/09		57Y4294 ann 03/16/10
ThinkPad Mini Dock Series 361	433710U ann 06/23/09	Up to 15.4" widescreen models: ThinkPad 15W Case Sleeve	51J0477 ann 08/18/09
61 When docked, ThinkPad Mini Dock Series 3 are inactive, ThinkPad Audio ports are active.	(4337 IUU) Audio ports	Lenovo Business Messenger Case	51J0475 ann 08/18/09
ThinkPad Mini Dock Plus Series 3 <sup>61</sup>	433810U ann 06/23/09	Lenovo Messenger Max ThinkPad Business Topload Case	41U5253 ann 05/01/07 43R2476 ann 05/13/08
61 When docked, ThinkPad Mini Dock Plus Sei	ries 3 (433810U) eSATA	ThinkPad Business Backpack	43R2482 ann 05/13/08
& Audio ports are inactive, ThinkPad eSATA &	•	ThinkPad Deluxe Expander Case ThinkPad Executive Leather Case	43R2478 ann 05/13/08 43R2480 ann 05/13/08
ThinkPad Mini Dock Plus Series 3 - Mobile WS	433820U ann 01/07/10	More information at www.lenovo.com/supp	
Keyboard	7000000 40/40/00		
TrackPoint Cap Collection USB Numeric Keypad	73P2698 ann 12/16/03 33L3225 ann 05/01/00	Monitors   Lenovo L2230x Wide 21.5" Monitor	5453HB1 ann 06/10/10
Preferred Pro USB Keyboard	73P5220 ann 06/21/05		5047HB2 ann 10/20/09
Enhanced Performance USB Keyboard Ultraslim Wireless Keyboard and Mouse <sup>52</sup>	73P2620 ann 03/23/04 57Y4700 ann 09/15/09	ThinkVision L1900p 19" Monitor ThinkVision L1951p Wide 19" Monitor	4431HE1 ann 11/11/08 2448HB6 ann 10/20/09
52 Wireless via 2.4GHz technology using a mid		ThinkVision L2250p Wide 22" Monitor	2572HB6 ann 10/20/09
ThinkPad USB Keyboard with TrackPoint Lenovo® USB Fingerprint Keyboard	55Y9003 ann 08/18/09 73P4730 ann 02/22/05	ThinkVision L2251p Wide 22" Monitor ThinkVision L2251x Wide 22" Monitor	2572HD6 ann 10/20/09 2578HB6 ann 10/20/09
Lenovo USB Smartcard Keyboard	51J0155 ann 03/24/09	ThinkVision L2321x Wide 23" Monitor	4014HB6 ann 06/10/10
Mouse		ThinkVision L2440p Wide 24" Monitor	4420HB2 ann 09/17/08
Lenovo Optical Mouse (USB)	06P4069 ann 05/21/03		15K5006 ann 05/10/00
Lenovo Laser Mouse (USB) ThinkPad USB Laser Mouse	41U3074 ann 01/23/07 57Y4635 ann 12/15/09		45K5296 ann 05/12/09 40Y7616 ann 08/23/05
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405 ann 08/27/02	ThinkVision Soundbar	45K1263 ann 09/16/08 73P2582 ann 12/29/03
ThinkPad Travel Mouse (USB, Optical) ThinkPad Bluetooth Laser Mouse	31P7410 ann 06/04/02 41U5008 ann 01/22/08	Kensington MicroSaver Cable Lock Kensington Twin Head Cable Lock	45K1620 ann 09/30/08
Multimodia		Lenovo Security Cable Lock	57Y4303 ann 08/24/10
<b>Multimedia</b> ThinkPad In-Ear Headphones	57Y4488 ann 01/07/10	Lenovo Easy Reach Monitor Stand  46 Compatible on selected Lenovo and Thin	55Y9258 <i>ann 09/22/09</i> kVision monitors.
·		More information at www.lenovo.com/supp	
Modem USB 2.0 Lenovo Modem	43R1814 ann 02/26/08		
	<u></u>	For more information on ThinkPad accessor www.lenovo.com/support/accessories	• •
Security Kensington® MicroSaver® Cable Lock	73P2582 ann 12/29/03	www.lenovo.com/support/notebookacces	ssories
Kensington Twin Head Cable Lock	45K1620 ann 09/30/08	www.lenovo.com/support/security	
Lenovo Security Cable Lock USB Gemplus GemPC Smart Card Reader	57Y4303 ann 08/24/10 41N3040 ann 02/21/06		
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# ThinkPad<sub>®</sub>



Lenovo® ThinkPad L512



Lenovo ThinkPad L512 with ThinkPad Battery 55++ (9-cell) 57Y4186



Lenovo ThinkPad L512



Lenovo ThinkPad L512



Lenovo ThinkPad L512

Type-model	Processor	GHz	Max turbo (GHz)	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue- tooth	Bat- tery cells	Preload	Avail date
4444-32U	i3-350M	2.26		2GB	15.6" HD	2.0M	160G 7200	11b/g/n	WWAN upg		Blue	6	Pro 32	May 10
4444-33U	i3-350M	2.26		2GB	15.6" HD	2.0M	160G 7200	Intel 6200 <sup>28</sup>	WWAN upg		Blue	6	Pro 64	May 10
4444-34U	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	320G 7200	Intel 6200	WWAN upg	Finger	Blue	6	Pro 64	May 10
4444-4EU	i3-370M	2.40		2GB	15.6" HD	2.0M	160G 7200	11b/g/n	WWAN upg		Blue	6	Pro 64	Jul 10
4444-4FU	i3-370M	2.40		2GB	15.6" HD	2.0M	160G 7200	Intel 6200	WWAN upg		Blue	6	Pro 64	Jul 10
4444-4VU	i5-560M	2.66	3.20	2GB	15.6" HD	2.0M	320G 7200	Intel 6200	WWAN upg	Finger	Blue	6	Pro 64	Sep 10

• These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Mainstream business performance; two spindles Intel® Core™ i3 processor i3-350M or i3-370M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache or Intel Core i5 processor i5-520M or i5-560M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	- Some: Genuine Windows® 7 Professional 32 Some: Genuine Windows 7 Professional 64 Preloaded applications¹⁴ (only some
Memory	2GB std / 8GB max <sup>7</sup> / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in one socket; one socket available	listed)  ■ Rescue and Recovery™  ■ Access Connections™  ■ Password Manager
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in <b>160GB</b> <sup>®</sup> (7200 rpm) or <b>320GB</b> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	ThinkVantage Power Manager     ThinkVantage System Update     Fingerprint Software (fingerprint)
Widescreen display Camera	15.6" (395mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	models)     Microsoft Office 2010 preloaded; purchase product key to activate     Corel® WinDVD® (DVD±RW)
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	Corel Burn.Now™ Lenovo Edition (DVD±RW)     Corel DVD MovieFactory® Lenovo Edition (DVD±RW)  Supports ThinkVantage® technologies
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch None	65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant
Dimensions <sup>3</sup> Weight <sup>2</sup> Case color Case material Battery - type	15.6W" (WxDxH): 15" x 9.7" x 1.26–1.42"; 380mm x 247mm x 32–36mm 4-cell: from 5.48 lb (2.49kg); 6-cell: from 5.67 lb (2.57kg); 9-cell: from 6.01 lb (2.73kg) black Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell	RoHS-compliant International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup> via 800-426-7378
Battery - life <sup>10</sup>	4-cell: up to 2.8 hr; 6-cell: up to 4.9 hr; 9-cell: up to 8.0 hr	ThinkPlus™. 22 1-year LOR24 9x5 NBD 45K5968
Chipset ExpressCard/34	Mobile Intel HM55 Express Chipset One slot (ExpressCard/34)	ThinkPlus 2-year LOR 9x5 NBD
Multicard Reader Ports	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor <sup>11</sup> (VGA DB-15, DisplayPort), ethernet (RJ-45)	45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970
PCIe Mini Card 11b/g/n Intel 6200 <sup>28</sup>	Two PCI Express Mini Card slots  Some: 11b/g/n wireless <sup>4</sup> , ThinkPad 11b/g/n, PCIe Half Mini Card  Some: 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2	ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975
WWAN upg Modem	Wireless WAN upgradable None	ThinkPlus 2-year P&L P/U Depot
Bluetooth™ Ethernet	Bluetooth 2.1 wireless, LED indicator Realtek® RTL8111DL Gigabit Network Connection	45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972
Intel AMT Audio support	None High Definition (HD) Audio, Realtek ALC269Q codec / stereo speakers, 1.5 watt x 2 /	ThinkPlus 4-year P&L P/U Depot 45K5974
Security Security chip	volume up, down, mute buttons / digital mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant r Some: UPEK fingerprint reader on palm rest, swipe sensor, supports the security chip	ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance
	<sup>2</sup> <b>1-year</b> - depot repair service / service upgrades <sup>22</sup> available	agreements at lenovo.com/thinkplus/warranty
		·

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue- tooth	Bat- tery cells	Preload	Avail date
4447-32U	i3-350M	2.26		2GB	15.6" HD	2.0M	160G 7200	11b/g/n	WWAN upg		Blue	6	Pro 32	May 10
4447-33U	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	160G 7200	Intel 6200 <sup>28</sup>	WWAN upg	Finger	Blue	6	Pro 64	May 10
เ 4447-3EU	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	160G 7200	Intel 6200	WWAN upg		Blue	6	Pro 32	Jul 10
☞ 4447-3HU	i3-370M	2.40		2GB	15.6" HD	2.0M	160G 7200	11b/g/n	WWAN upg		Blue	6	Pro 64	Jul 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These models have a depot repair service 3-year limited warranty
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor  **Mainstream business performance; two spindles** Intel® Core™ i3 processor i3-350M or i3-370M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz Hyper-Threading technology; 3MB cache or Intel Core i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz Intel Turbo Boost, Hyper-Threading technology; 3MB cache	- Some: Genuine Windows 7 Professional 64  Preloaded applications <sup>14</sup> (only some
Memory  2GB std / 8GB max <sup>7</sup> / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in one socket; one socket available	listed)  • Rescue and Recovery™  • Access Connections™  • Password Manager
SATA DVD±RW SATA disk  DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in  160GB <sup>8</sup> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	<ul> <li>ThinkVantage Power Manager</li> <li>ThinkVantage System Update</li> <li>Fingerprint Software (fingerprint</li> </ul>
Widescreen display Camera  15.6" (395mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	models) • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions)
Integrated graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J79 supports dual independent display;  Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J791;	Adobe® Reader®     Adobe Flash® Player     Skype™ for Windows     Microsoft Office 2010 preloaded;     purchase product key to activate
Keyboard TrackPoint® TrackPoint® pointing device, Internet Scroll Bar¹³, magnifying glass Touchpad ThinkLight™ UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-None	(DVD±RW)
Dimensions <sup>3</sup> 15.6W" (WxDxH): 15" x 9.7" x 1.26–1.42"; 380mm x 247mm x 32–36mm Weight <sup>2</sup> 4-cell: from 5.48 lb (2.49kg); 6-cell: from 5.67 lb (2.57kg); 9-cell: from 6.01 lb (2.73 black	0/
Case material Battery - type Battery - life <sup>10</sup> Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell Battery - life <sup>10</sup> 4-cell: up to 2.8 hr; 6-cell: up to 4.9 hr; 9-cell: up to 8.0 hr	Supports ThinkVantage® technologies 65-watt AC adapter
Chipset Mobile Intel HM55 Express Chipset ExpressCard/34 One slot (ExpressCard/34) Multicard Reader Ports Three USB 2.0 (one powered), one USB 2.0/eSATA combo port,	EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service <sup>17</sup> 24 hour x 7 day¹8 toll-free support
external monitor <sup>11</sup> (VGA DB-15, DisplayPort), ethernet (RJ-45)  PCIe Mini Card 11b/g/n Intel 6200 <sup>28</sup> WWAN upg Modem  external monitor <sup>11</sup> (VGA DB-15, DisplayPort), ethernet (RJ-45)  Two PCI Express Mini Card slots Some: 11b/g/n wireless <sup>4</sup> , ThinkPad 11b/g/n, PCIe Half Mini Card Some: 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200 Wireless WAN upgradable None	ThinkPlus 4-year LOR 9x5 NBD
Bluetooth™ Bluetooth 2.1 wireless, LED indicator Ethernet Realtek® RTL8111DL Gigabit Network Connection Intel AMT None	45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024
Audio support  High Definition (HD) Audio, Realtek ALC269Q codec / stereo speakers, 1.5 watt x volume up, down, mute buttons / digital mic, mic mute button, combo audio/mic jack Security  Power-on password, hard disk password, supervisor password, security keyhole	ThinkPlus 5-year P&L P/U Depot
Security chip Trusted Platform Module, TCG 1.2-compliant Fingerprint reader <i>Some</i> : UPEK fingerprint reader on palm rest, swipe sensor, supports the security	agreements at
Limited warranty <sup>12</sup> <b>3-years</b> /1-yr battery - depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty

#### ThinkPad® L512 Accessories

inki dd E312 Accessories			
Memory 1GB PC3-10600 DDR3 L-H SODIMM 1GB PC3-10600 DDR3 L-H SODIMM (25Pack 2GB PC3-10600 DDR3 L-H SODIMM 2GB PC3-10600 DDR3 L-H SODIMM (25Pack 4GB PC3-10600 DDR3 L-H SODIMM	55Y3710 ann 03/02/10	Batteries ThinkPad Battery 55+ (6-cell) ThinkPad Battery 55++ (9-cell) ThinkPad External Battery Charger <sup>44</sup> 44 Requires the <i>ThinkPad 90W AC Adapter</i> 40Y7659 or the adapter provided with the	•
Storage and removable storage SL410/510 500GB Disk SATA 3G/s (5400 rpm) USB 2.0 Portable 500GB Hard Disk USB 2.0 Portable Secure 160GB Hard Disk USB 2.0 Portable Secure 320GB Hard Disk eSATA/USB 2.0 Secure 500GB Hard Drive USB 2.0 Portable DVD Burner  Wireless WAN (Mini PCI Express) Only WWAN upgradable models: ThinkPad Gobi™ 2000 Broadband Option ThinkPad AT&T® Gobi 2000 Broadband Option  ThinkPad Expansion Lenovo® Essential Notebook Stand	45K1690 ann 05/26/09 43R2018 ann 11/18/08 43R2019 ann 11/18/08 57Y4400 ann 01/07/10 43N3264 ann 01/05/10	More information at www.lenovo.com/allda ThinkPad 65W AC Adapter <sup>45</sup> <sup>45</sup> Only compatible with the integrated graph ThinkPad 90W AC Adapter Lenovo Power Hub 90W Ultraslim AC/DC Combo Adapter More info at www.lenovo.com/support/pov Charging tips for 90W Ultraslim AC/DC Com •iPod and iPhone Charge Tip (L10a) •Generic Micro USB charge tip (L18) More information at www.lenovopowertips.  Carrying Cases Up to 15.4" widescreen models:	40Y7696 ann 01/05/06 nics models. 40Y7659 ann 09/20/05 57Y4600 ann 09/07/10 41R4493 ann 09/22/09 veradapters bb Adapter 41R4493 41R4481 ann 12/18/07 41R4490 ann 01/06/09
USB Port Replicator with Digital Video ThinkPad Port Replicator Series 3 ThinkPad Mini Dock Series 3 <sup>61</sup> When docked, ThinkPad Mini Dock Series 3 are inactive, ThinkPad Audio ports are active.	45K1610 ann 07/28/09 433610W ann 06/23/09 433710U ann 06/23/09 3 (433710U) Audio ports	ThinkPad 15W Case Sleeve Lenovo Business Messenger Case Lenovo Messenger Max ThinkPad Business Topload Case ThinkPad Business Backpack	51J0477 ann 08/18/09 51J0475 ann 08/18/09 41U5253 ann 05/01/07 43R2476 ann 05/13/08 43R2482 ann 05/13/08
ThinkPad Mini Dock Plus Series 361 61 When docked, ThinkPad Mini Dock Plus Se & Audio ports are inactive, ThinkPad eSATA & ThinkPad Mini Dock Plus Series 3 - Mobile WS  Keyboard TrackPoint Cap Collection USB Numeric Keypad Preferred Pro USB Keyboard Enhanced Performance USB Keyboard Ultraslim Wireless Keyboard and Mouse <sup>52</sup> 52 Wireless via 2.4GHz technology using a mi ThinkPad USB Keyboard with TrackPoint Lenovo® USB Fingerprint Keyboard Lenovo USB Smartcard Keyboard  Mouse Lenovo Optical Mouse (USB) ThinkPad USB Laser Mouse Lenovo ScrollPoint® Mouse (USB, Optical) ThinkPad Travel Mouse (USB, Optical) ThinkPad In-Ear Headphones  Modem USB 2.0 Lenovo Modem  Security Kensington® MicroSaver® Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock USB Gemplus GemPC Smart Card Reader	A Audio ports aré active. 3 433820U ann 01/07/10 73P2698 ann 12/16/03 33L3225 ann 05/01/00 73P5220 ann 06/21/05 73P2620 ann 03/23/04 57Y4700 ann 09/15/09		5453HB1 ann 06/10/10 5047HB2 ann 10/20/09 4431HE1 ann 11/11/08 2448HB6 ann 10/20/09 2572HB6 ann 10/20/09 2578HB6 ann 10/20/09 4014HB6 ann 06/10/10 4420HB2 ann 09/17/08  45K5296 ann 05/12/09 40Y7616 ann 08/23/05 45K1263 ann 09/16/08 73P2582 ann 12/29/03 45K1263 ann 09/30/08 57Y4303 ann 08/24/10 55Y9258 ann 09/22/09 kVision monitors.  **rort/monitoraccessories** essories**



Lenovo® ThinkPad T410



Lenovo ThinkPad T410



Lenovo ThinkPad T410



Lenovo ThinkPad T410



ThinkPad triple external monitor configuration using NVIDIA's Optimus technology



ThinkPad Mini Dock Series 3 433710U

	Type-model F			Max turbo (GHz)		IHz)	Wide- screen display	Cam- era	Disk SATA GB <sup>®</sup> rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN		Blue-			Preload	Avail date
	2516-ADU	i5-520M	2.40	2.93	2GBx1 10	66	14.1" WXGA	2.0M	250G 5400	11b/g/n		None	None	6	No	Pro 32	Jan 10
	2516-DCU	i5-560M	2.66	3.20	2GBx1 10	66	14.1" WXGA	2.0M	320G 7200	11b/g/n		None	None	6	No	Pro 64	Sep 10
<b>135</b>	2516-F9U	i5-480M	2.66	2.93	4GBx1 13	33	14.1" WXGA	2.0M	320G 7200	Intel 1000	WWAN upg	None	None	6	No	Pro 64	Jan 11

- These small and medium business (SMB) models are part of the US TopSeller™ Program These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Premiere performance; two spindles Intel® Core™ i5 processor i5-480M, i5-520M, or i5-560M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	- Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7
Memory	<b>2GB</b> or <b>4GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz or PC3-10600 1333MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Professional 64  Preloaded applications <sup>14</sup> (only some
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 250GB <sup>8</sup> (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	listed)  • Rescue and Recovery™  • Access Connections™  • Password Manager  • ThinkVantage System Update
Widescreen display Camera	<b>14.1"</b> (358mm) <b>WXGA (1280x800) color</b> , anti-glare, <b>LED backlight</b> , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	ThinkVantage Power Manager ThinkVantage Toolbox Adobe® Reader® Adobe Flash® Player
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort) @ 60Hz; 2048x1536 (VGA) @ 75Hz; 1920x1200 @ 60Hz (single-link DVI-D via cable 45J7915)	Skype™ for Windows     Microsoft Office 2010 preloaded; purchase product key to activate     Roxio® Creator® Business Edition (DVD±RW)     Roxio MyDVD® (DVD±RW)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Corel® WinDVD® (DVD±RW)  Supports ThinkVantage® technologies  65-watt AC adapter  ThinkPad Pall Core (one piece)
Dimensions <sup>3</sup> Weight <sup>2</sup> Case color Case material  Battery - type Battery - life <sup>10</sup>	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm 6-cell: starting at 5.0 lb (2.27kg); 9-cell: starting at 5.35 lb (2.43kg) Black Top: High Elasticity PolyCarbonate (HEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell, supports optional Slice battery (57Y4545) as 2nd battery at bottom 6-cell: up to 6.6 hr; 9-cell: up to 11 hr; 9-cell plus Slice battery: up to 22 hr	ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹7 24 hour x 7 day¹8 toll-free support during the warranty period¹2
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	via 800-426-7378  ThinkPlus™.22 1-year LOR24 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD
PCIe Mini Card 11b/g/n Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots  Some: 11b/g/n wireless <sup>4</sup> , ThinkPad 11b/g/n, PCIe Half Mini Card  Some: 11b/g/n wireless <sup>4</sup> , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2  Some: Wireless WAN upgradable  56K V.926 modem  None  Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1  Intel Active Management Technology (iAMT)  High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 /	45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot
Security Security chip Fingerprint reade	speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant	ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
	• Long the control of	r

Type-model Proces	Base tu		Wide- screen ry display	Camera	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	PCIe Mini Card WWAN	Carrier		Blue-	Bat- tery In cells vi	tel Pro Preload	Avail date
2518-C2U i5-520	M 2.40 2.	93 2GB	14.1" WXGA	2.0M	250G 5400	Intel 6200 <sup>28</sup>	Gobi 2000	AT&T <sup>23</sup>	Finger	Blue	6 vF	ro Pro 32	Jan 10
2518-F3U i5-520	M 2.40 2.	93 2GB	14.1" WXGA	2.0M	250G 5400	11b/g/n	WWAN upg			Blue	6	Pro 32	Jan 10
2518-F6U i5-520	M 2.40 2.	93 <i>4GB</i>	14.1" WXGA+	2.0M	80G SSD	Intel 6200	WWAN upg		Finger	Blue	<b>9</b> vF	ro Pro 32	Jan 10
2518-4HU i5-520	M 2.40 2.	93 2GB	14.1" WXGA	2.0M	320G 7200	Intel 6200	WWAN upg		Finger	Blue	6 vF	ro Pro 32	Mar 10
2518-QBU i5-540	M 2.53 3.	06 <i>4GB</i>	14.1" WXGA	2.0M	160G SSD	Intel 6200	WWAN upg		Finger		6 vF	ro Pro 64	Jul 10
2518-AHU i5-560	M 2.66 3.	20 2GB	14.1" WXGA	2.0M	320G 7200	Intel 6200	WWAN upg			Blue	6 vF	ro Pro 64	Sep 10

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   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

	• These systems are Microsoft® Office 2010 Product Key Heady (O10PKH)	
Positioning Processor	Premiere performance; two spindles Intel® Core™ i5 processor i5-520M, i5-540M, or i5-560M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7
Memory	<b>2GB</b> or <b>4GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; standard memory in one socket; one socket available	Professional 64  Preloaded applications¹⁴ (only some listed)  ■ Rescue and Recovery™
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access Some: 80GB³ or 160GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high Some: 250GB (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ All: removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive	Access Connections <sup>™</sup> Password Manager     Fingerprint Software (fingerprint models)     ThinkVantage System Update     ThinkVantage Power Manager
Widescreen display	Some: 14.1" (358mm) WXGA (1280x800) color, anti-glare, LED backlight, 220 nits, 16:10 aspect ratio, 300:1 contrast ratio  Some: 14.1" (358mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 220 nits, 16:10 aspect ratio, 300:1 contrast ratio	<ul> <li>ThinkVantage Toolbox</li> <li>Norton™ Internet Security 2011         (30 days of virus definitions)</li> <li>Adobe® Reader®</li> <li>Adobe Flash® Player</li> </ul>
Integrated graphics	Camera on top of screen, 2.0-megapixel, fixed focus  Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	Windows Live™ Toolbar     Skype™ for Windows     Microsoft Office 2010 preloaded; purchase product key to activate     Microsoft Research AutoCollage Touch     Roxio® Creator® Business Edition
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	(DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Dimensions <sup>3</sup> Weight <sup>2</sup> Case color Case material Battery - type Battery - life <sup>10</sup>	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm 6-cell: starting at 5.0 lb (2.27kg); 9-cell: starting at 5.35 lb (2.43kg) Black Top: High Elasticity PolyCarbonate (HEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell, supports optional Slice battery (57Y4545) as 2nd battery 6-cell: up to 6.6 hr; 9-cell: up to 11 hr; 9-cell plus Slice battery: up to 22 hr	
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame)
PCIe Mini Card 11b/g/n Intel 6200 <sup>28</sup> WWAN upg Gobi™ 2000	Two PCI Express Mini Card slots  Some: 11b/g/n wireless <sup>4</sup> , ThinkPad 11b/g/n, PCIe Half Mini Card  Some: 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2  Some: Wireless WAN upgradable  Some: Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A,  GPRS/WCDMA/HSPA, GPS, contract required with service provider  Some: AT&T®, contract required with service provider	EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹7 24 hour x 7 day¹8 toll-free support during the warranty period¹² via 800-426-7378
Modem Bluetooth™ Ethernet Intel AMT Audio support	56K V.92 <sup>6</sup> modem Some: Bluetooth 2.1 wireless, LED indicator Non-vPro model: Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 vPro model: Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	ThinkPlus™.22 3-year LOR24 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023
	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant r Some: UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip  3-years/1-yr battery - depot repair service / service upgrades <sup>22</sup> available	ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

Max Base turbo Type-model Processor (GHz) (GHz) Me	Wide- screen display	Disk SATA GB <sup>®</sup> rpm	PCIe Mini Card 802.11	PCle Mini Card WWAN		tery	Power Adapter Inte (watt) vPro		Avail date
2518-BGU i7-620M 2.66 3.33 40	GBx1 1333 14.1" WXGA+	500G 7200	Intel 1000	WWAN upg		9	90W	Pro 64	Jan 11
2518-BJU i5-560M 2.66 3.20 20	GBx1 1066 14.1" WXGA+	320G 7200	WiMAX	Gobi 2000	selectable	6	65W vPro	Pro 64	Jan 11

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Positioning Processor	Premiere performance; two spindles Intel® Core™ i5 processor i5-560M with dual-core, or Intel Core i7 processor i7-620M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; i5-560M: 3MB cache; i7-620M: 4MB cache	Preloaded operating system <sup>20</sup> - Genuine Windows <sup>®</sup> 7 Professional 64 Preloaded applications <sup>14</sup> (only some listed) - Rescue and RecoveryIM
Memory	<b>2GB</b> or <b>4GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz or PC3-10600 1333MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	<ul> <li>Rescue and Recovery™</li> <li>Access Connections™</li> <li>Password Manager</li> </ul>
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 320GB <sup>8</sup> (7200 rpm) or 500GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	<ul> <li>Fingerprint Software (fingerprint models)</li> <li>ThinkVantage System Update</li> <li>ThinkVantage Power Manager</li> <li>ThinkVantage Toolbox</li> </ul>
Widescreen display Camera	14.1" (358mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	<ul> <li>Norton™ Internet Security 2011 (30 days of virus definitions)</li> <li>Adobe® Reader®</li> <li>Adobe Flash® Player</li> </ul>
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	Windows Live™ Toolbar     Skype™ for Windows     Microsoft Office 2010 preloaded; purchase product key to activate     Microsoft Research AutoCollage Touch
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Roxio® Creator® Business Edition (DVD±RW)     Roxio MyDVD® (DVD±RW)     Corel® WinDVD® (DVD±RW)
Dimensions <sup>3</sup> Weight <sup>2</sup> Case color Case material Battery - type Battery - life <sup>10</sup>	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm 6-cell: starting at 5.0 lb (2.27kg); 9-cell: starting at 5.35 lb (2.43kg) Black Top: High Elasticity PolyCarbonate (HEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell, supports optional Slice battery (57Y4545) as 2nd battery 6-cell: up to 6.6 hr; 9-cell: up to 11 hr; 9-cell plus Slice battery: up to 22 hr	
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort),	Supports ThinkVantage® technologies
	modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	65-watt or 90-watt AC adapter
PCIe Mini Card Intel 1000 WiMAX	Two PCI Express Mini Card slots  Some: 11b/g/n wireless <sup>4</sup> , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2  Some: 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX	ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant
WWAN upg Gobi™ 2000	Some: Wireless WAN upgradable Some: Wireless WAN, Qualcomm chipset, PCle Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider	RoHS-compliant International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support
Carrier	Some: User selectable at first boot, AT&T®, Verizon®, or Sprint®, contract required with service provider	during the warranty period <sup>12</sup> via 800-426-7378
Modem Bluetooth™ Ethernet	56K V.92 <sup>6</sup> modem Bluetooth 2.1 wireless, LED indicator Non-vPro model: Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 vPro model: Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1	ThinkPlus™.22 3-year LOR24 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022
Intel AMT Audio support	Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance
Limited warranty <sup>12</sup>	3-years/1-yr battery - depot repair service / service upgrades <sup>22</sup> available	agreements at lenovo.com/thinkplus/warranty

Base Type-model Processor (GHz)		Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	PCle Mini Card WWAN	Finger print reader	Blue- tooth	Intel vPro	Preload	Avail date
2518-AJU i5-560M 2.66	3.20 2GB	14.1" WXGA+	2.0M	320G 7200	Intel 6200 <sup>28</sup>	Day NAWW	None	Blue	vPro	Pro 64	Sep 10

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   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Premiere performance; two spindles Intel® Core™ i5 processor i5-560M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Genuine Windows® 7 Professional 64 Preloaded applications <sup>14</sup> (only some
Memory	<b>2GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	Rescue and Recovery™     Access Connections™
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 320GB³ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	<ul> <li>Password Manager</li> <li>ThinkVantage System Update</li> <li>ThinkVantage Power Manager</li> <li>ThinkVantage Toolbox</li> <li>Norton™ Internet Security 2011</li> </ul>
Widescreen display Camera	14.1" (358mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	(30 days of virus definitions)  • Adobe® Reader®  • Adobe Flash® Player  • Windows Live™ Toolbar
Optimus graphics <sup>37</sup>	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics in processor, and NVIDIA Quadro® NVS3100M, PCI Express® x16, 512MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	Skype™ for Windows     Microsoft Office 2010 preloaded; purchase product key to activate     Microsoft Research AutoCollage Touch     Roxio® Creator® Business Edition (DVD±RW)     Roxio MyDVD® (DVD±RW)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Corel® WinDVD® (DVD±RW)
Dimensions <sup>3</sup> Weight <sup>2</sup> Case color Case material  Battery - type Battery - life <sup>10</sup>	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm 6-cell: starting at 5.0 lb (2.27kg); 9-cell: starting at 5.35 lb (2.43kg) Black Top: High Elasticity PolyCarbonate (HEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 9-cell, supports optional Slice battery (57Y4545) as 2nd battery at bottom 6-cell: up to 6.5 hr; 9-cell: up to 10.9 hr; 9-cell plus Slice battery: up to 21.9 hr	Supports ThinkVantage® technologies 90-watt AC adapter
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹7 24 hour x 7 day¹8 toll-free support during the warranty period¹2
PCIe Mini Card Intel 6200 <sup>28</sup> WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.926 modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole	via 800-426-7378  ThinkPlus <sup>TM-22</sup> 3-year LOR <sup>24</sup> 9x5 NBD 45K6021  ThinkPlus 4-year LOR 9x5 NBD 45K6022  ThinkPlus 5-year LOR 9x5 NBD 45K6024  ThinkPlus 4-year P&L P/U Depot 45K6023  ThinkPlus 5-year P&L P/U Depot
Security chip Fingerprint reade	Trusted Platform Module, TCG 1.2-compliant	45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

Base Type-model Processor (GHz)	Max turbo (GHz) Memory	Wide- screen display	CCFL or LED	Camera	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11			Blue- tooth	Bat- tery l cells v		Preload	Avail date
2516-AFU i5-520M 2.40	2.93 2GB 1	4.1" WXGA	LED	2.0M	320G 7200	11b/g/n	None	None	Blue	9	Nο	Pro 32	Jan 10

- This small and medium business (SMB) model is part of the US TopSeller™ Program This system is Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Premiere performance; two spindles Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Genuine Windows <sup>®</sup> 7 Professional 32 Preloaded applications <sup>14</sup> (only some
Memory	<b>2GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	Rescue and Recovery™     Access Connections™
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 320GB <sup>8</sup> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	<ul> <li>Password Manager</li> <li>ThinkVantage System Update</li> <li>ThinkVantage Power Manager</li> <li>ThinkVantage Toolbox</li> <li>Adobe® Reader®</li> </ul>
Widescreen display Camera	14.1" (358mm) WXGA (1280x800) color, anti-glare, LED backlight, 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	<ul> <li>Adobe Flash® Player</li> <li>Skype™ for Windows</li> <li>Microsoft Office 2010 preloaded; purchase product key to activate</li> </ul>
Discrete graphics	NVIDIA® Quadro® NVS3100M, PCI Express® x16, 256MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	Microsoft Research AutoCollage Touch     Roxio® Creator® Business Edition (DVD±RW)     Roxio MyDVD® (DVD±RW)     Corel® WinDVD® (DVD±RW)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Supports ThinkVantage® technologies  90-watt AC adapter ThinkPad Roll Cage (one-piece
Dimensions <sup>3</sup> Weight <sup>2</sup> Case color Case material  Battery - type Battery - life <sup>10</sup>	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm 6-cell: starting at 5.0 lb (2.27kg); 9-cell: starting at 5.35 lb (2.43kg) Black 10p: High Elasticity PolyCarbonate (HEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 9-cell, supports optional Slice battery (57Y4545) as 2nd battery at bottom 6-cell: up to 5.0 hr; 9-cell: up to 8.3 hr; 9-cell plus Slice battery: up to 16.6 hr	magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹7 24 hour x 7 day¹8 toll-free support during the warranty period¹² via 800-426-7378
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	ThinkPlus <sup>TM. 22</sup> 1-year LOR <sup>24</sup> 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD
PCIe Mini Card 11b/g/n WWAN upg Modem	Two PCI Express Mini Card slots 11b/g/n wireless <sup>4</sup> , ThinkPad 11b/g/n, PCIe Half Mini Card None 56K V.92 <sup>6</sup> modem	45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975
Bluetooth™ Ethernet Intel AMT	Bluetooth 2.1 wireless, LED indicator Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT)	ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot
Audio support	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974
Security Security chip	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant	ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance
Fingerprint reader Limited warranty <sup>12</sup>	<sup>2</sup> <b>1-year</b> - depot repair service / service upgrades <sup>22</sup> available	agreements at lenovo.com/thinkplus/warranty

Towns was del Busses	Base tu		Wide- screen	0	Disk SATA	PCIe Mini Card	PCIe Mini Card	Ocumber		Blue-		Dualaad		vail
Type-model Proces 2518-C4U i5-520 2518-F5U i5-540 2518-4KU i5-520 2518-4LU i5-540 2518-QCU i5-540	0M 2.40 2 0M 2.53 3 0M 2.40 2 0M 2.53 3	.93 2GB .06 4GB .93 4GB .06 4GB	14.1" WXGA+ 14.1" WXGA+ 14.1" WXGA+ 14.1" WXGA+	2.0M 2.0M 2.0M	320G 7200 500G 7200	0	Gobi 2000 WWAN upg Gobi 2000 WWAN upg WWAN upg	Verizon  Verizon	<sup>6</sup> Fing Fing Fing	Blue Blue Blue Blue	vPro vPro vPro	Pro 32 Pro 32 Pro 64 Pro 64 Pro 64	Jan Jan Mar Mar	10 10 10
	• These me	odels have	edium busines e a depot repair Microsoft® Offi	service	e 3-year limite	d warranty	•	Program						
Positioning Processor	Intel® Cor DMI (Direc	<b>e™ i5 pro</b> c t Media In	ce; two spindles cessor i5-520N terface), integr per-Threading	<b>/I</b> or <b>i5-5</b> ated DD	R3 memory	controller (up	to 1066MHz)	,  - 8	Some: Some:	Genuii Profes Genuii	ne Wii sional ne Wii	ndows 7		
Memory	dual-chani Italics:	nel capable standar	BB max <sup>7</sup> / PC3- e, two 204-pin s rd memory in b rd memory in o	SO-DIM oth sock	IM sockets; kets; no socke	ets available;		list	eloadeo		icatio	ns <sup>14</sup> (on	y soı	me
SATA DVD±RW Ultrabay Slim SATA disk	One modu Some: 16 Some: 32	lar bay for <b>0GB</b> <sup>®</sup> Solio <b>0GB</b> (7200 TA 3.0Gb/	.5Gb/s, 9.5mm interchangeab d State Drive (\$ 0 rpm) or <b>500G</b> /s, 2.5" wide, 9. pgradable, sup	le devic SSD) / S i <b>B</b> (7200 5mm hi	es (right side SATA 3.0Gb/s 7 rpm) / gh, Active Pro	), 9.5mm high 1.8" wide, 8r stection Syste	mm high m™	ess	Access Passwo Fingerp nodels) ThinkVa ThinkVa	Conne rd Mar rint So intage intage	ections nager oftware Syste Powe	s™ e (fingerp em Upda er Manag	te	
Widescreen display Camera	220 nits, 1	6:10 aspe	<b>6A+ (1440x900</b> ct ratio, 300:1 creen, 2.0-mega	contrast	ratio	ED backlight	,	1 • (	30 days	<sup>M</sup> Inter s of vir	net Se us de	ox ecurity 20 finitions)		
Discrete graphics	external and digital more supports of Maximum	nalog mon nitor suppo lual indepe <i>external re</i>	VS3100M, PCI itor support via ort via DisplayP endent display; esolution: 2560 85Hz; 1920x12	VGA D ort (sup )x1600 (	B-15 connect ports single-li	or and ink DVI-D via @60Hz;		5); • A • \ • S • N	Microsoft Office 2010 preloaded; purchase product key to activate     Microsoft Research AutoCollage Touch     Roxio® Creator® Business Edition (DVD±RW)     Roxio MyDVD® (DVD±RW)					
Keyboard TrackPoint® Touchpad ThinkLight™	TrackPoint UltraNav™	® pointing of the point of the	e button, spill-re device, "Press- chpad below ke pard to improve	to-Seled eybrd, Ta	ct," Internet S ap Zones, scr	croll Ɓar¹³, ma olling regions	agnifying glas label, multi-to	s ouch (						
Dimensions <sup>3</sup> Weight <sup>2</sup> Case color Case material	6-cell: star Black Top: H	ting ať 5.0 ligh Elastic	3.2" x 9.4" x 1.1 lb (2.27kg); <i>9</i> - city PolyCarbon er Reinforced F	<i>cell:</i> stai ate (HE	rting at 5.35 II		9mm		Jorei* v	VIIIDV	ט״ (ט	VD±RW)		
Battery - type Battery - life <sup>10</sup> Chipset	6-cell: up t	o 5.0 hr; <i>9</i>	upports optiona O-cell: up to 8.3 Express Chips	hr; <i>9-ce</i>				om						
ExpressCard/34 Smart Card read Multicard reader Ports	One slot (I None 5-in-1 read Four USB modem (R	ExpressCa der (MMC, 2.0 (one p J-11), ethe	Memory Stick, owered), eSAT ernet (RJ-45), 400 (4-pin con	Mem S A port, e	external moni	tor (VĠA DB-	15, DisplayPo	Su	pports -			je® techr	olog	ies
PCIe Mini Card 11b/g/n Intel 6200 <sup>28</sup> WiMAX WWAN upg Gobi™ 2000	Some: 11 Some: 11 Some: W Some: W	b/g/n wire a/b/g/n wire a/b/g/n an tel Centrind ireless WA ireless WA	ni Card slots less <sup>4</sup> , ThinkPac reless, PCIe Ha Id WiMAX wireloo® Advanced-N Nu upgradable NN, Qualcomm IMA/HSPA, GP	alf Mini ( ess, PC + WiM/ chipset,	Card, Intel Ce le Half Mini C AX 6250, 2x2 PCIe Mini Ca	ntrino® Advar card, AGN + 1x2 W ard, EV-DO R	ViMAX ev. A,	2x2 EP EN Ro Int 24	magnes PEAT™ ( IERGY HS-cor ernation hour x	sium fr Gold ra STAR npliant nal Wa 7 day¹	ame) ating 5.0-6 t arranty toll-f	compliar Service ree supp	nt 17 port	
Carrier Modem Bluetooth™	Some: Ve 56K V.92 <sup>6</sup> Bluetooth	erizon®, co modem 2.1 wireles	ntract required ss, LED indicate	with ser	rvice provider	·		Th	/ia 800-	-426-7	378	LOR <sup>24</sup> 9>		
Ethernet Intel AMT Audio support	vPro mode Intel Active	e <i>l:</i> Inte e Manager	el 82577LC Giç el 82577LM Giç nent Technolog Audio, Conexa	gabit Ne ıy (iAMT	etwork Conne	ction (Hanksv	rille), PHY, PC	le x1				R 9x5 NB 45K R 9x5 NB	D 6022 D	2
Security Security chip	speaker vo combo aud Power-on	olume up, o dio/mic jac password,	down and mute	buttons	s / dual array upervisor pas	microphone,	mic mute butt	.   111				P/U De <sub>l</sub> 45K P/U De <sub>l</sub>	6023 oot	3
Fingerprint reader  Limited warranty <sup>12</sup>	Some: UF	PEK Finge wer On Au	rprint reader or uthentication, s	n palm r upports	est, swipe ser the security o	hip		Po	st-warra reemen	anty ai	nnual	45K mainten	6025 ance	
Emiliou warranty	o-years/1-	yı ball <del>e</del> iy	deportepail S	CI VICE /	service upgra	au <del>c</del> o avaliab	,,,,		ieiiov	o.com	ı ıı ılı ıK	plus/war	ıaılıy	

	Type-model	Processor	GHz	Memor	Wide- screen y display	Camera	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Finger print reader				Preload	Avail date
≫ :	2516-AQU	i3-330M	2.13	2GB	14.1" WXGA	2.0M	250G 5400	Intel 1000			None	None	6	No	Pro 32	Feb 10
	2516-72U	i3-370M	2.40	2GB	14.1" WXGA	2.0M	250G 5400	Intel 1000			None	None	6	No	Pro 64	Jul 10
	2516-73U	i3-370M	2.40	2GB	14.1" WXGA	2.0M	320G 7200	Intel 1000			None	None	6	No	Pro 64	Jul 10
:	2516-74U	i3-370M	2.40	2GB	14.1" WXGA	2.0M	320G 7200	Intel 1000	Gobi 2000	selectable	None	None	6	No	Pro 64	Jul 10
ris 1	2516-FBU	i3-390M	2.66	2GB	14.1" WXGA	2.0M	320G 7200	Intel 1000	WWAN upg		None	None	6	No	Pro 64	Jan 11

- These small and medium business (SMB) models are part of the US TopSeller™ Program These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Premiere performance; two spindles Processor Intel® Core™ i3 processor i3-330M, i3-370M, or i3-390M with dual-core, Preloaded operating standard standar	ystem <sup>20</sup>
DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache - Some: Genuine Wind	2 lows 7
Memory  2GB std / 8GB max <sup>7</sup> / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in one socket; one socket available  Professional 6  Preloaded applications listed)	
SATA DVD±RW Ultrabay Slim SATA disk  DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 250GB³ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™  ■ Rescue and Recovery Access Connections™ ■ Password Manager ■ ThinkVantage System ■ ThinkVantage Power N	u Update Manager
Widescreen display Camera 14.1" (358mm) WXGA (1280x800) color, anti-glare, LED backlight, 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus  14.1" (358mm) WXGA (1280x800) color, anti-glare, LED backlight, Adobe® Reader® Adobe® Reader® Adobe® Reader® Adobe® Reader® Adobe® Reader® Skype™ for Windows	(
Integrated graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display;  Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)  Intel HD Graphics in processor, external capacity of the processor of the proc	to activate utoCollage ness Edition
Keyboard TrackPoint® TrackPoint® Touchpad ThinkLight™ 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys Touchpad ThinkLight™ 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions  * Roxio MyDVD® (DVD® Corel® WinDVD® (DVD® (DV	±RW) D±RW)
Dimensions³ Weight² Case color Case material Battery - type Battery - life¹ B	ne-piece
Chipset Mobile Intel QM57 Express Chipset  ExpressCard/34 One slot (ExpressCard/34) Smart Card read None Multicard reader Ports  Simult	e support eriod <sup>12</sup>
modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)  ThinkPlus 2-year LOB 9	45K5968
PCIe Mini Card Intel 1000 Two PCI Express Mini Card slots 11b/g/n wireless <sup>4</sup> , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 Some: Wireless WAN upgradable Some: Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS	45K5969 9x5 NBD 45K5970
Carrier Some: User selectable at first boot, AT&T®, Verizon®, or Sprint®, contract required with service provider  ThinkPlus 5-year LOR 9	x5 NBD
Modem 56K V.92 <sup>6</sup> modem Shetooth™ None ThinkPlus 2-year P&L P	45K5971
Intel AMT Intel Active Management Technology (iAMT) Audio support High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 /	45K5972
speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack  Security Security chip Trusted Platform Module, TCG 1.2-compliant  Fingerprint reader Nese	45K5974 P/U Depot 45K5976
Fingerprint reader None  Limited warranty <sup>12</sup> <b>1-year</b> - depot repair service / service upgrades <sup>22</sup> available  agreements at lenovo.com/thinkplu	s/warranty

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See footnotes for important warranty information

"" US model announced January 11, 2011; previous models on February 2 or July 6, 2010

"" US model withdrawn effective July 31, 2010

Type-model	Processor	GHz	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier		Blue- tooth			Preload	Avail date
2518-JWU	i3-370M	2.40	2GB	14.1" WXGA	2.0M	320G 7200	Intel 1000	Gobi 2000	selectable		Blue	9	No	Pro 64	Jul 10
2518-JXU	i3-370M	2.40	2GB	14.1" WXGA	2.0M	250G 5400	Intel 1000	WWAN upg		Finger		9	No	Pro 64	Jul 10
2518-MHU	i3-370M	2.40	2GB	14.1" WXGA	2.0M	250G 5400	Intel 1000			Finger		9	No	Pro 64	Jul 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These models have a depot repair service 3-year limited warranty
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Premiere performance; two spindles Intel® Core™ i3 processor i3-370M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Genuine Windows <sup>®</sup> 7 Professional 64 Preloaded applications <sup>14</sup> (only some
Memory	<b>2GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	listed)  ■ Rescue and Recovery™  ■ Access Connections™
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 250GB³ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	Password Manager     Fingerprint Software (fingerprint models)     ThinkVantage System Update     ThinkVantage Power Manager
Widescreen display Camera	14.1" (358mm) WXGA (1280x800) color, anti-glare, LED backlight, 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	ThinkVantage Toolbox     Norton™ Internet Security 2011     (30 days of virus definitions)     Adobe® Reader®
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display;  Maximum external resolution: 2560x1600 (DisplayPort) @ 60Hz; 2048x1536 (VGA) @ 75Hz; 1920x1200 @ 60Hz (single-link DVI-D via cable 45J7915)	<ul> <li>Adobe Flash® Player</li> <li>Windows Live™ Toolbar</li> <li>Skype™ for Windows</li> <li>Microsoft Office 2010 preloaded; purchase product key to activate</li> <li>Microsoft Research AutoCollage</li> </ul>
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Touch  Roxio® Creator® Business Edition (DVD±RW)  Roxio MyDVD® (DVD±RW)  Corel® WinDVD® (DVD±RW)
Dimensions <sup>3</sup> Weight <sup>2</sup> Case color Case material  Battery - type Battery - life <sup>10</sup>	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm 6-cell: starting at 5.0 lb (2.27kg); 9-cell: starting at 5.35 lb (2.43kg) Black Top: High Elasticity PolyCarbonate (HEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 9-cell, supports optional Slice battery (57Y4545) as 2nd battery 6-cell: up to 6.6 hr; 9-cell: up to 11 hr; 9-cell plus Slice battery: up to 22 hr	Corel William (DVDIRW)
Chipset ExpressCard/34	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34)	Supports ThinkVantage® technologies
Smart Card read Multicard reader Ports	None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating
PCIe Mini Card Intel 1000 WWAN upg Gobi™ 2000	Two PCI Express Mini Card slots 11b/g/n wireless <sup>4</sup> , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 Some: Wireless WAN upgradable Some: Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS	ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup>
Carrier	Some: User selectable at first boot, AT&T®, Verizon®, or Sprint®, contract required with service provider	via 800-426-7378  ThinkPlus <sup>TM, 22</sup> 3-year LOR <sup>24</sup> 9x5 NBD
Modem Bluetooth™ Ethernet Intel AMT	56K V.92 <sup>6</sup> modem Some: Bluetooth 2.1 wireless, LED indicator Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1	45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022
Audio support	Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button,	ThinkPlus 5-year LOR 9x5 NBD 45K6024
Security	combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole	ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot
Security chip Fingerprint reade	Trusted Platform Module, TCG 1.2-compliant r Some: UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	Post-warranty annual maintenance agreements at
Limited warranty <sup>1</sup>	<sup>2</sup> 3-years/1-yr battery - depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty

Type-model Processor GHz Memory	Wide- CCFL screen or display LED	Camera	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	PCle Mini Card WWAN	Carrier	Blue/ Fing	Intel vPro Preload	Avail date
2518-JYU i3-370M 2.40 2GB 14	I.1" WXGA+ LED	2.0M	320G 7200	Intel 6200 <sup>28</sup>	WWAN upa	None	Yes	No Pro 64	Jul 10

- This small and medium business (SMB) model is part of the US TopSeller™ Program
  This model has a depot repair service 3-year limited warranty
  This system is Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Premiere performance; two spindles Intel® Core™ i3 processor i3-370M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Genuine Windows <sup>®</sup> 7 Professional 64 Preloaded applications <sup>14</sup> (only some
Memory	<b>2GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	isted)  Rescue and Recovery™  Access Connections™
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 320GB <sup>8</sup> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	Password Manager     Fingerprint Software (fingerprint models)     ThinkVantage System Update     ThinkVantage Power Manager
Widescreen display Camera	14.1" (358mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	ThinkVantage Toolbox     Norton™ Internet Security 2011     (30 days of virus definitions)     Adobe® Reader®
Discrete graphics	NVIDIA® Quadro® NVS3100M, PCI Express® x16, 256MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	<ul> <li>Adobe Flash® Player</li> <li>Windows Live™ Toolbar</li> <li>Skype™ for Windows</li> <li>Microsoft Office 2010 preloaded; purchase product key to activate</li> <li>Microsoft Research AutoCollage</li> </ul>
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Touch  Roxio® Creator® Business Edition (DVD±RW)  Roxio MyDVD® (DVD±RW)  Corel® WinDVD® (DVD±RW)
Dimensions <sup>3</sup> Weight <sup>2</sup> Case color Case material	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm 6-cell: starting at 5.0 lb (2.27kg); 9-cell: starting at 5.35 lb (2.43kg) Black Top: High Elasticity PolyCarbonate (HEPC); Bottom: Carbon-Fiber Reinforced Plastic	
Battery - type Battery - life <sup>10</sup>	Lithium Ion <b>9-cell</b> , supports optional Slice battery (57Y4545) as 2nd battery at bottom 6-cell: up to 5.0 hr; 9-cell: up to 8.3 hr; 9-cell plus Slice battery: up to 16.6 hr	Supports ThinkVantage® technologies  90-watt AC adapter
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹7 24 hour x 7 day¹8 toll-free support
PCIe Mini Card Intel 6200 <sup>28</sup> WWAN upg Modem	Two PCI Express Mini Card slots 11a/b/g/n wireless <sup>4</sup> , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92 <sup>6</sup> modem	during the warranty period <sup>12</sup> via 800-426-7378  ThinkPlus™.22 3-year LOR24 9x5 NBD
Bluetooth™ Ethernet Intel AMT	Bluetooth 2.1 wireless, LED indicator Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT)	45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD
Audio support	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	45K6024 ThinkPlus 4-year P&L P/U Depot
Security Security chip Fingerprint reade	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant r UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance
Limited warranty <sup>12</sup>	<sup>2</sup> 3-years/1-yr battery - depot repair service / service upgrades <sup>22</sup> available	agreements at lenovo.com/thinkplus/warranty

#### ThinkPad® T410 Accessories

Memory 1GB PC3-8500 DDR3 Low-Halogen SODIMM 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) 2GB PC3-8500 DDR3 Low-Halogen SODIMM 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) 4GB PC3-8500 DDR3 Low-Halogen SODIMM  Ultrabay Slim 9.5mm	57Y4385 ann 06/23/09 55Y3707 ann 06/23/09 57Y4386 ann 06/23/09 55Y3708 ann 06/23/09	Security Kensington® MicroSaver® Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock USB Gemplus GemPC Smart Card Reader ThinkPad T400/T410/R400 Privacy Filter Note: ThinkPad T400/T410/R400 or T410s.	43R2472 ann 08/05/08
Serial ATA Hard Drive Bay Adapter III DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s DVD Burner Ultrabay Slim Drive II SATA 1.5G/s Ultrabay Slim Blu-ray Burner II (SATA)	43N3412 ann 06/23/09 43N3292 ann 08/03/10 43N3229 ann 06/23/09 43N3230 ann 06/23/09	Batteries ThinkPad Battery 55+ (6-cell) ThinkPad Battery 55++ (9-cell) ThinkPad Battery 27++ (9-cell, slice) <sup>43</sup>	57Y4185 ann 03/30/10 57Y4186 ann 03/30/10 57Y4545 ann 01/07/10
Storage and removable storage 160GB Disk SATA 3.0Gb/s (7200 rpm) <sup>41</sup> 250GB Disk SATA 3.0Gb/s (5400 rpm) <sup>41</sup> 250GB Disk FDE SATA 3.0Gb/s (7200 rpm) <sup>41</sup> 320GB Disk SATA 3.0Gb/s (5400 rpm) <sup>41</sup>	41N5737 ann 10/16/07 43R8152 ann 01/15/08 43N3410 ann 01/20/09 43N3403 ann 08/05/08	43To be used along with system battery for a attaches under ThinkPad using docking con (not supported when using Series 3 Port Re ThinkPad External Battery Charger	all-day computing; nector
320GB Disk SATA 3.0Gb/s (7200 rpm) <sup>41</sup> 500GB Disk SATA 3.0Gb/s (7200 rpm) <sup>41</sup> <sup>41</sup> Can be used as the main HDD or with <i>Serial ATA Hard Drive Bay Adapter III 43</i>	43N3411 ann 01/20/09 43N3423 ann 01/07/10	More information at www.lenovo.com/allday ThinkPad 65W AC Adapter <sup>45</sup> Only compatible with the integrated graphi ThinkPad 90W AC Adapter	40Y7696 <i>ann 01/05/06</i> ics models. 40Y7659 <i>ann 09/20/05</i>
128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover) 256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover) ThinkPad 160GB Intel X25-M SSD <sup>41</sup>	43N3406 ann 08/26/08 43N3417 ann 06/23/09 43N3435 ann 06/22/10	Lenovo Power Hub 90W Ultraslim AC/DC Combo Adapter More info at www.lenovo.com/support/pow	57Y4600 ann 09/07/10 41R4493 ann 09/22/09 reradapters
USB 2.0 Portable 320GB Hard Disk USB 2.0 Portable 500GB Hard Disk USB 2.0 Portable Secure 160GB Hard Disk USB 2.0 Portable Secure 320GB Hard Disk	45K1689 ann 03/17/09 45K1690 ann 05/26/09 43R2018 ann 11/18/08 43R2019 ann 11/18/08	Charging tips for 90W Ultraslim AC/DC Combine oiPod and iPhone Charge Tip (L10a)  •Generic Micro USB charge tip (L18)	41R4481 ann 12/18/07 41R4490 ann 01/06/09
eSATA/USB 2.0 Secure 500GB Hard Drive USB 2.0 Portable DVD Burner	57Y4400 ann 01/07/10 43N3264 ann 01/05/10	More information at www.lenovopowertips.	com
Wireless WAN (Mini PCI Express) Only WWAN upgradable models: ThinkPad Gobi™ 2000 Broadband Option	78Y1399 ann 01/07/10	Up to 14" widescreen models: ThinkPad 14W Case Sleeve Up to 15.4" widescreen models:	57Y4294 ann 03/16/10
ThinkPad AT&T® Gobi 2000 Broadband Option  ThinkPad Expansion Lenovo® Essential Notebook Stand USB Port Replicator with Digital Video ThinkPad Port Replicator Series 3 ThinkPad Mini Dock Series 3 ThinkPad Mini Dock Plus Series 3	78Y1398 ann 01/07/10 45J9292 ann 05/12/09 45K1610 ann 07/28/09 433610W ann 06/23/09 433710U ann 06/23/09 433810U ann 06/23/09	ThinkPad 15W Case Sleeve Lenovo Business Messenger Case Lenovo Messenger Max Lenovo Performance BackPack ThinkPad Business Topload Case ThinkPad Business Backpack ThinkPad Deluxe Expander Case ThinkPad Executive Leather Case	51J0477 ann 08/18/09 51J0475 ann 08/18/09 41U5253 ann 05/01/07 41U5254 ann 05/01/07 43R2476 ann 05/13/08 43R2482 ann 05/13/08 43R2478 ann 05/13/08 43R2480 ann 05/13/08
ThinkPad Mini Dock Plus Series 3 - Mobile WS  Keyboard  TrackPoint Cap Collection  USB Numeric Keypad		Up to 15.6" widescreen models: Wenger Backpack for Lenovo Wenger Slim Case for Lenovo Wenger Deluxe Slim Case for Lenovo	57Y4271 ann 01/07/10 57Y4272 ann 01/07/10 57Y4273 ann 01/07/10
Preferred Pro USB Keyboard Enhanced Performance USB Keyboard Ultraslim Wireless Keyboard and Mouse <sup>52</sup> <sup>52</sup> Wireless via 2.4GHz technology using a mid ThinkPad USB Keyboard with TrackPoint Lenovo® USB Fingerprint Keyboard Lenovo USB Smartcard Keyboard	73P5220 ann 06/21/05 73P2620 ann 03/23/04 57Y4700 ann 09/15/09 cro-size USB receiver. 55Y9003 ann 08/18/09 73P4730 ann 02/22/05 51J0155 ann 03/24/09	ThinkVision L1951p Wide 19" Monitor	5453HB1 ann 06/10/10 5047HB2 ann 10/20/09 4431HE1 ann 11/11/08 2448HB6 ann 10/20/09
Mouse Lenovo Optical Mouse (USB) Lenovo Laser Mouse (USB) ThinkPad USB Laser Mouse Lenovo ScrollPoint® Mouse (USB, Optical) ThinkPad Travel Mouse (USB, Optical)	06P4069 ann 05/21/03 41U3074 ann 01/23/07 57Y4635 ann 12/15/09 31P7405 ann 08/27/02	ThinkVision L2250p Wide 22" Monitor ThinkVision L2251p Wide 22" Monitor ThinkVision L2251x Wide 22" Monitor ThinkVision L2321x Wide 23" Monitor www.lenovo.com/support/thinkpad/optimu	2572HB6 ann 10/20/09 2572HD6 ann 10/20/09 2578HB6 ann 10/20/09 4014HB6 ann 06/10/10 is-monitors
ThinkPad Travel Mouse (USB, Optical) ThinkPad Bluetooth Laser Mouse  Multimedia ThinkPad In-Ear Headphones	31P7410 ann 06/04/02 41U5008 ann 01/22/08 57Y4488 ann 01/07/10	Monitor Accessories <sup>46</sup> Lenovo USB-to-DVI Monitor Adapter DisplayPort to Single-link DVI-D Cable ThinkVision USB Soundbar ThinkVision Soundbar Kensington MicroSaver Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock Lenovo Easy Reach Monitor Stand 46 Compatible on selected Lenovo and Think	45K5296 ann 05/12/09 45J7915 ann 08/05/08 40Y7616 ann 08/23/05 45K1263 ann 09/16/08 73P2582 ann 12/29/03 45K1620 ann 09/30/08 57Y4303 ann 08/24/10 55Y9258 ann 09/22/09 Vision monitors.
		More information at www.lenovo.com/supper	ort/monitoraccessories
		For more information on ThinkPad accessorie www.lenovo.com/support/accessories www.lenovo.com/support/notebookacceswww.lenovo.com/support/security	•
		Other accessories at www.lenovo.com/acce	essories

Other accessories at www.lenovo.com/accessories Accessories Guide pdf at www.lenovo.com/accessoriesguide







Lenovo® ThinkPad T410s

Lenovo ThinkPad T410s



ThinkPad Battery 42 (3-cell, bay) 57Y4536



ThinkPad Battery 59+ (6-cell) 51J0497



ThinkPad triple external monitor configuration using NVIDIA's Optimus technology



Lenovo ThinkPad T410s

Type-model Processo	Max Base turbo r (GHz) (GHz)	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue- tooth	Card slot	Intel vPro Preloa	Avail d date
2901-ATU i5-560M	2 66 3 20	2GB	14 1" WXGA+	2 0M	250G 5400	11h/a/n	WWAN una	None	Blue	Fynress	No Pro 6	4 Sep 10

This small and medium business (SMB) model is part of the US TopSeller™ Program

Positioning Premiere performance and ultraportability; two spindles Preloaded operations	
Processor  Intel® Core™ i5 processor i5-560M with dual-core,  DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz),  Intel Turbo Boost, Hyper-Threading technology: 3MB cache	ting system <sup>20</sup> ws <sup>®</sup> 7 ations <sup>14</sup> (only some
Memory  2GB std / 8GB max <sup>7</sup> / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in one socket; one socket available  Nemory  1stadact applic listed) Rescue and Rec Access Connect	covery™
Shock Mounted Hard Drive, Active Protection System™ • ThinkVantage P	lystem Update lower Manager resentation Director roductivity Center
Widescreen display 300 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera Camera on top of screen, 2.0-megapixel, fixed focus  - Roxio® Creator® (DVD±RW) - Roxio MyDVD® - Roxio MyDVD® - Roxio MyDVD® - Corel® WinDVD® - Corel® WinDVD®	(DVD±RW)
Integrated graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display:	ntage® technologies
Keyboard TrackPoint® TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass Touchpad ThinkLight™ Select, "Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions  ThinkPad Roll Cag magnesium frar EPEAT™ Gold rati ENERGY STAR® 5	ge (one-piece ne) ing
Dimensions <sup>3</sup> Weight <sup>2</sup> Case material Battery - type  14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm 6-cell: starting at 3.94 lb (1.79kg) Display cover: Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); Base: Magnesium alloy Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim	toll-free support anty period <sup>12</sup>
	ear LOR <sup>24</sup> 9x5 NBD 45K5968
Chipset Mobile Intel QS57 Express Chipset ExpressCard/34 One slot (ExpressCard/34) ThinkPlus 2-year	LOR 9x5 NBD
Multicard Reader None Ports Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)	45K5970
PCIe Mini Card 11b/g/n WWAN upg Wireless WAN upgradable  ThinkPlus 4-year I ThinkPlus 4-year I ThinkPlus 5-year I ThinkPlus 5-year I ThinkPlus 5-year I	45K5973 LOR 9x5 NBD
Worked Application  Modem  None  Bluetooth™  Bluetooth 2.1 wireless, LED indicator  ThinkPlus 2-year	
Ethernet Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel AMT Intel Active Management Technology (iAMT)  ThinkPlus 3-year	45K5971 P&L P/U Depot 45K5972
Audio support High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button,	
combo audio/mic jack Security Power-on password, hard disk password, supervisor password, security keyhole  ThinkPlus 5-year	
Security chip Trusted Platform Module, TCG 1.2-compliant Post-warranty ann agreements at	
	inkplus/warranty

	Type-model	Processor		Max turbo (GHz)		Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCIe Mini Card 802.11	PCle Mini Card WWAN	Finger print reader	Card slot	Intel vPro	Preload	Avail date
	2904-FZU	i5-520M	2.40	2.93	4GB	14.1" WXGA+	2.0M	128G SSD	Intel 6200 <sup>28</sup>	WWAN upg	Finger	Express	vPro	Pro 64	Mar 10
	2904-GGU	i5-520M	2.40	2.93	2GB	14.1" WXGA+	2.0M	250G 5400	Intel 6200	WWAN upg		Express	vPro	Pro 64	May 10
逐	2904-HCU	i5-560M	2.66	3.20	4GB	14.1" WXGA+	2.0M	128G SSD	Intel 6200	WWAN upg		Express	vPro	Pro 64	Sep 10

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   These models have a depot repair service 3-year limited warranty
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor  Memory  SATA DVD±RW Ultrabay Slim SATA disk	Premiere performance and ultraportability; two spindles Intel® Core™ i5 processor i5-520M or i5-560M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache  2GB or 4GB std / 8GB max² / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Italics: standard memory in both sockets; no sockets available; Non-italics: standard memory in one socket; one socket available  DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access Some: 128GB® Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high Some: 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, Active Protection System™	Preloaded operating system <sup>20</sup> - Genuine Windows® 7 Professional 64  Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Power Manager			
Widescreen display Camera Integrated graphics	All: removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive  14.1" (358mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 300 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus  Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	<ul> <li>Adobe® Reader®</li> <li>Adobe Flash® Player</li> <li>Skype™ for Windows</li> <li>Microsoft Office 2010 preloaded; purchase product key to activate</li> <li>Microsoft Research AutoCollage Touch</li> <li>Roxio® Creator® Business Edition (DVD±RW)</li> <li>Roxio MyDVD® (DVD±RW)</li> </ul>			
Keyboard TrackPoint® Touchpad ThinkLight™ Dimensions³	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions  14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm	Corel® WinDVD® (DVD±RW)			
Weight <sup>2</sup> Case material	6-cell: starting at 3.94 lb (1.79kg) Display cover: Carbon-fiber reinforced plastic (top),	Supports ThinkVantage® technologies			
Battery - type Battery - life <sup>10</sup>	glass-fiber reinforced plastic (side walls); Base: Magnesium alloy Lithium Ion <b>6-cell</b> , supports unique 2nd battery in Ultrabay Slim 6-cell: up to 4.8 hr; 6-cell plus Ultrabay battery: up to 7.9 hr	65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame)			
Chipset ExpressCard/34 Multicard Reader Ports	Mobile Intel QS57 Express Chipset One slot (ExpressCard/34) None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)	EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service <sup>17</sup> 24 hour x 7 day¹8 toll-free support			
PCIe Mini Card Intel 6200 <sup>28</sup> WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless <sup>4</sup> , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable None Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button,	during the warranty period <sup>12</sup> via 800-426-7378  ThinkPlus <sup>TM, 22</sup> 3-year LOR <sup>24</sup> 9x5 NBD 45K6021  ThinkPlus 4-year LOR 9x5 NBD 45K6022  ThinkPlus 5-year LOR 9x5 NBD 45K6024  ThinkPlus 4-year P&L P/U Depot			
Security Security chip Fingerprint reade	combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Some: UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at			
Limited warranty <sup>12</sup>	<sup>2</sup> 3-years/1-yr battery - depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty			

	Type-model	Processor	Base (GHz)			Wide- screen y display	Camera	Disk SATA GB <sup>8</sup> rpm	PCle Mini Card 802.11	PCle Mini Card WWAN				Intel vPro	Preload	Avail date
	2904-G2U	i5-520M	2.40	2.93	4GB	14.1" WXGA+	2.0M	128G SSD	Intel 6200 <sup>28</sup>	WWAN upg	Finger	Blue	3-in-1	vPro	Pro 64	Mar 10
D3F	2904-GEU	i5-520M	2.40	2.93	2GB	14.1" WXGA+	2.0M	250G 5400	Intel 6200	WWAN upg	•	Blue	3-in-1	vPro	Pro 64	May 10
135	2904-GFU	i5-540M	2.53	3.06	2GB	14.1" WXGA+	2.0M	128G SSD	Intel 6200	WWAN upg		Blue	3-in-1	vPro	Pro 64	May 10

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   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Premiere performance and ultraportability; two spindles Intel® Core™ i5 processor i5-520M or i5-540M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Genuine Windows <sup>®</sup> 7 Professional 64 Preloaded applications <sup>14</sup> (only some
Memory	<b>2GB</b> or <b>4GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	itsted)  Rescue and Recovery™  Access Connections™  Password Manager
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access Some: 128GB³ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high Some: 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, Active Protection System™ All: removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive	Fingerprint Software (fingerprint models)     ThinkVantage System Update     ThinkVantage Power Manager     ThinkVantage Toolbox     Adobe® Reader®
Widescreen display Camera	14.1" (358mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 300 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	<ul> <li>Adobe Flash® Player</li> <li>Skype™ for Windows</li> <li>Microsoft Office 2010 preloaded; purchase product key to activate</li> </ul>
Switchable graphics	Dynamic switching between discrete and integrated graphics (user selectable), Intel HD Graphics in processor, and NVIDIA® Quadro® NVS3100M, PCI Express® x16, 512MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2048x1536 (VGA)@75Hz(integrated) or 85Hz(discrete); 1920x1200@60Hz (single-link DVI-D via cable 45J7915); 2560x1600 (DP)@60Hz	Microsoft Research AutoCollage Touch     Roxio® Creator® Business Edition (DVD±RW)     Roxio MyDVD® (DVD±RW)     Corel® WinDVD® (DVD±RW)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions <sup>3</sup> Weight <sup>2</sup>	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm 6-cell: starting at 3.94 lb (1.79kg)	
Case material  Battery - type Battery - life <sup>10</sup>	Display cover: Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); Base: Magnesium alloy Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim 6-cell: up to 4.8 hr; 6-cell plus Ultrabay battery: up to 7.9 hr	Supports ThinkVantage® technologies  90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame)
Ports PCle Mini Card	Mobile Intel QS57 Express Chipset  None 3-in-1 reader (MMC, SD, SDHC)  Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)  Two PCI Express Mini Card slots  Two PCI Express Mini Card slots  Ta/b/g/n wireless <sup>4</sup> PCIs Half Mini Card, Intel Centring® Advanced N 6300, 3x3	EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹7 24 hour x 7 day¹8 toll-free support during the warranty period¹² via 800-426-7378
Intel 6200 <sup>28</sup> WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	11a/b/g/n wireless <sup>4</sup> , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable None Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	ThinkPlus™.22 3-year LOR24 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023
	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant r Some: UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at
Limited warranty	<sup>2</sup> <b>3-years</b> /1-yr battery - depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty

Max	Wide-		Disk	PCle	PCle	Finger			
Base turbo Type-model Processor (GHz) (GHz) Memory	screen display	Camera	SATA GB <sup>®</sup> rpm	Mini Card 802.11	Mini Card WWAN	print Blu reader too		Intel vPro Pre	Avail eload date
Type modern rocessor (ariz) (ariz) memory	aispiay	Odincia	GD IPIII	002.11	WWAIT	reader too	3101	VI 10 110	loud date

2904-HDU i5-560M 2.66 3.20 4GB 14.1" WXGA+ 2.0M 128G SSD Intel 620028 WWAN upg Finger Blue 3-in-1 vPro Pro 64 Sep 10

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  This model has a depot repair service 3-year limited warranty
  This system is Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Premiere performance and ultraportability; two spindles Intel® Core™ i5 processor i5-560M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> Genuine Windows® 7     Professional 64      Preloaded applications <sup>14</sup> (only some
Memory	4GB std / 8GB max <sup>7</sup> / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics</i> : standard memory in both sockets; no sockets available	isted)  ■ Rescue and Recovery™  ■ Access Connections™
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 128GB <sup>8</sup> Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive	Password Manager     Fingerprint Software (fingerprint models)     ThinkVantage System Update
Widescreen display Camera	14.1" (358mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 300 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	ThinkVantage Power Manager ThinkVantage Toolbox Adobe® Reader® Adobe Flash® Player
Optimus graphics <sup>37</sup>	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics in processor, and NVIDIA Quadro® NVS3100M, PCI Express® x16, 512MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display;  Maximum external resolution: 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915); 2560x1600 (DP)@60Hz	Skype™ for Windows     Microsoft Office 2010 preloaded; purchase product key to activate     Microsoft Research AutoCollage Touch     Roxio® Creator® Business Edition (DVD±RW)     Roxio MyDVD® (DVD±RW)
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Corel® WinDVD® (DVD±RW)
Dimensions <sup>3</sup> Weight <sup>2</sup> Case material	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm 6-cell: starting at 3.94 lb (1.79kg) Display cover: Carbon-fiber reinforced plastic (top),	Supports ThinkVantage® technologies
Battery - type Battery - life <sup>10</sup>	Splay Cover. Carbon-liber reinforced plastic (side walls); Base: Magnesium alloy Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim 6-cell: up to 4.7 hr; 6-cell plus Ultrabay battery: up to 7.8 hr	90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame)
Chipset ExpressCard/34 Multicard Reader Ports	Mobile Intel QS57 Express Chipset None 3-in-1 reader (MMC, SD, SDHC) Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)	EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹7 24 hour x 7 day¹8 toll-free support
PCIe Mini Card Intel 6200 <sup>28</sup> WWAN upg	Two PCI Express Mini Card slots 11a/b/g/n wireless <sup>4</sup> , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2	during the warranty period <sup>12</sup> via 800-426-7378
WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Wireless WAN upgradable None Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCle x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	ThinkPlus <sup>TM.22</sup> 3-year LOR <sup>24</sup> 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at
Limited warranty <sup>12</sup>	3-years/1-yr battery - depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty

Type-model	Processor	GHz	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue- tooth	Card slot	Intel vPro	Preload	Avail date
2901-ARU	i3-370M	2.40	2GB	14.1" WXGA+	2.0M	250G 5400	11b/g/n	WWAN upg	Finger	Blue	Express	No	Pro 64	Aug 10
2901-ASU	i3-370M	2.40	2GB	14.1" WXGA+	2.0M	128G SSD	Intel 6200 <sup>28</sup>	WWAN upg	Finger	Blue	Express	No	Pro 64	Aug 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These system are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor    Premiere performance and ultraportability; two spindles   Intel® Core™ i3 processor i3-370M with dual-core,   DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz),   Hyper-Threading technology; 3MB cache   Memory   2GB std / 8GB max <sup>7</sup> / PC3-8500 1066MHz DDR3, non-parity,   dual-channel capable, two 204-pin SO-DIMM sockets;   Non-italics: standard memory in one socket; one socket available   SATA DVD±RW   DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable   One modular bay for interchangeable devices (right side). 9.5mm high, bottom access   Fingerprint Software   Fingerprint Software   Preloaded operating syst   Genuine Windows® 7   Professional 64   Preloaded applications¹⁴   listed)   Rescue and Recovery™   Access Connections™   Client Security Solution™   Fingerprint Software   Fingerprint Software   Fingerprint Software   Fingerprint Software   Preloaded operating syst   Capable (approximately the professional 64   Preloaded applications¹⁴   Software   Preloaded applications²†   Software   Preloaded applications²†   Software   Preloaded applications²†	(only some
Memory  2GB std / 8GB max' / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in one socket; one socket available  SATA DVD±RW  DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable    Ilisted	м pdate
SATA DVD±RW DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable • Client Security Solution <sup>TI</sup>	pdate
SATA dísk  Some: 128GB° Solid State Drive (SSD) / SATÀ 3.0Gb/s, 1.8" wide, 5mm high Some: 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, Active Protection System™  All: removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive  • ThinkVantage System U • ThinkVantage Prosentati • ThinkVantage Productivi	ity Center
Widescreen display Camera 14.1" (358mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 300 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus  14.1" (358mm) WXGA+ (1440x900) color, anti-glare, LED backlight, purchase product key to Roxio® Creator® Busines (DVD±RW)	activate
Integrated graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort) @ 60Hz; 2048x1536 (VGA) @ 75Hz; 1920x1200 @ 60Hz (single-link DVI-D via cable 45J7915)  Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); Supports ThinkVantage® te	RŴ)
Keyboard TrackPoint® TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass Touchpad ThinkLight™ Touchpad Touc	<u> </u>
Dimensions³ Dimensions³ Dimensions³ Dimensions³ Dimensions³ Weight² Case material Display cover: Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); Base: Magnesium alloy Battery - type Battery - life¹ Battery - life¹ Display cover: Carbon-fiber reinforced plastic (side walls); Base: Magnesium alloy Lithium lon 6-cell, supports unique 2nd battery in Ultrabay Slim Battery - life¹ Gold rating ENERGY STAR® 5.0-comp RoHS-compliant International Warranty Ser 24 hour x 7 day¹® toll-free s during the warranty perior yia 800-426-7378	vice <sup>17</sup> support
Chipset Mobile Intel QS57 Express Chipset ExpressCard/34 One slot (ExpressCard/34) Multicard Reader None  Mobile Intel QS57 Express Chipset  ThinkPlus™.22 1-year LOR3	<sup>24</sup> 9x5 NBD 45K5968
Ports Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)	NBD 45K5969
PCIe Mini Card 11b/g/n Intel 6200 <sup>28</sup> WWAN upg Two PCI Express Mini Card slots Some: 11b/g/n wireless <sup>4</sup> , ThinkPad 11b/g/n, PCIe Half Mini Card Intel 6200 <sup>28</sup> WWAN upg Wireless WAN upgradable ThinkPlus 3-year LOR 9x5 ThinkPlus 4-year LOR 9x5 ThinkPlus 5-year LOR 9x5 ThinkPlus 5-year LOR 9x5	45K5970 NBD 45K5973
WWAN dpg  Wreless WAN dpgradable  Modem  None  Bluetooth 7  Bluetooth 2.1 wireless, LED indicator  Ethernet  Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCle x1  ThinkPlus 5-year LOR 9x5  ThinkPlus 2-year P&L P/U	45K5975 Depot
Intel AMT None Audio support High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 /	45K5971 Depot 45K5972
speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack  Security  Security  Security  Speaker volume up, down and mute buttons / dual array microphone, mic mute button, mute button, combo audio/mic jack  ThinkPlus 4-year P&L P/U  ThinkPlus 5-year P&L P/U  ThinkPlus 5-year P&L P/U	Depot 45K5974
Security chip Trusted Platform Module, TCG 1.2-compliant Fingerprint reader UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator,  Post-warranty annual main	45K5976
Power On Authentication, supports the security chip  Limited warranty¹² 1-year - depot repair service / service upgrades²² available  agreements at lenovo.com/thinkplus/v	varranty

Type-model	Processor	GHz	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	PCle Mini Card WWAN	Finger print reader	Blue- tooth	Card slot	Intel vPro	Preload	Avail date
2904-H6U	i3-370M	2.40	2GB	14.1" WXGA+	2.0M	250G 5400	11b/g/n	WWAN upg		Blue	Express	No	Pro 64	Aug 10
2904-H7U	i3-370M	2.40	2GB	14.1" WXGA+	2.0M	160G SSD	Intel 1000	WWAN upg	Finger	Blue	Express	No	Pro 64	Aug 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These models have a depot repair service 3-year limited warranty
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Premiere performance and ultraportability; two spindles Intel® Core™ i3 processor i3-370M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Genuine Windows® 7 Professional 64 Preloaded applications <sup>14</sup> (only some
Memory	<b>2GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	listed)  ■ Rescue and Recovery™  ■ Access Connections™
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access Some: 160GB³ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high Some: 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, Active Protection System™ All: removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive	Password Manager     Fingerprint Software (fingerprint models)     ThinkVantage System Update     ThinkVantage Power Manager     ThinkVantage Toolbox
Widescreen display Camera	14.1" (358mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 300 nits, 16:10 aspect ratio, 300:1 contrast ratio, Camera on top of screen, 2.0-megapixel, fixed focus	Norton™ Internet Security 2011 (30 days of virus definitions)     Adobe® Reader®     Adobe Flash® Player
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	Windows Live™ Toolbar     Skype™ for Windows     Microsoft Office 2010 preloaded; purchase product key to activate     Microsoft Research AutoCollage Touch
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Roxio® Creator® Business Edition (DVD±RW)     Roxio MyDVD® (DVD±RW)     Corel® WinDVD® (DVD±RW)
Dimensions <sup>3</sup> Weight <sup>2</sup> Case material  Battery - type Battery - life <sup>10</sup>	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm 6-cell: starting at 3.94 lb (1.79kg) Display cover: Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); Base: Magnesium alloy Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim 6-cell: up to 4.8 hr; 6-cell plus Ultrabay battery: up to 7.9 hr	Supports ThinkVantage® technologies  65-watt AC adapter ThinkPad Roll Cage (one-piece
Chipset ExpressCard/34 Multicard Reader Ports	Mobile Intel QS57 Express Chipset One slot (ExpressCard/34) None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)	magnesium frame)` EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹7
PCIe Mini Card 11b/g/n Intel 1000	Two PCI Express Mini Card slots  Some: 11b/g/n wireless <sup>4</sup> , ThinkPad 11b/g/n, PCIe Half Mini Card  Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2	24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup> via 800-426-7378
WWAN upg Modem Bluetooth™ Ethernet	Wireless WAN upgradable None Bluetooth 2.1 wireless, LED indicator Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1	ThinkPlus™.22 3-year LOR24 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022
Intel AMT Audio support	None High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button,	ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot
Security Security chip Fingerprint reader	combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant  Some: UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator,	45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance
Limited warranty <sup>12</sup>	Power On Authentication, supports the security chip  2 3-years/1-yr battery - depot repair service / service upgrades <sup>22</sup> available	agreements at lenovo.com/thinkplus/warranty

#### ThinkPad® T410s Accessories

Memory  1GB PC3-8500 DDR3 Low-Halogen SODIMM 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) 2GB PC3-8500 DDR3 Low-Halogen SODIMM 2GB PC3-8500 DDR3 Low-Halogen SODIMM 2GB PC3-8500 DDR3 Low-Halogen SODIMM Witrabay Slim 9.5mm Serial ATA Hard Drive Bay Adapter III DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s DVD Burner Ultrabay Slim Drive II SATA 1.5G/s DVD Burner Ultrabay Slim Drive II SATA 1.5G/s Ultrabay Slim Blu-ray Burner II (SATA)  Storage and removable storage  1.8" 250GB Disk SATA 3.0Gb/s (7200 rpm) 500GB Disk SATA 3.0Gb/s (7200 rpm) 51 Can be used with Serial ATA Hard Drive Bay in the Ultrabay  128GB SSD SATA 3.0Gb/s 1.8"(2.5" cover) 256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover) 257GB FDE SSD SATA 3GB/s 1.8"(2.5" cover) 258 Wineless Wan (Mini PCI Express) 258 Numeric Keypad 259 Portable Secure 160GB Hard Disk 259 Numeric Keypad 250 Portable Secure 3 ThinkPad Mini Dock Plus Series 3 ThinkPad Wini Dock Plus Series 3 ThinkPad USB Keyboard and Mouse 258 Wireless via 2.4GHz technology usi	57Y4385 ann 06/23/09 55Y3707 ann 06/23/09 57Y4386 ann 06/23/09 55Y3708 ann 06/23/09 43N3412 ann 06/23/09 43N3292 ann 08/03/10 63 43N3292 ann 06/23/09 43N3418 ann 06/23/09 43N3423 ann 01/07/10 64 43N3417 ann 06/23/09 43N3417 ann 06/23/09 43N3417 ann 06/23/09 43N3418 ann 01/07/10 64 43N3417 ann 06/23/09 43N3417 ann 06/23/09 43N3412 in Ultrabay th the drive 45K1689 ann 03/17/09 45K1690 ann 05/26/09 43R2018 ann 11/18/08 57Y4400 ann 01/07/10 43N3264 ann 01/07/10 478Y1398 ann 01/07/10 78Y1398 ann 01/07/10 45J9292 ann 05/12/09 433K10U ann 06/23/09 433R10U ann 06/23/09 433R10U ann 06/23/09 433R10U ann 06/23/09 433R30U ann 06/23/09 53P2620 ann 03/23/04 57Y4700 ann 09/15/09 cro-size USB receiver. 55Y9003 ann 08/18/09 73P4730 ann 09/15/09 cro-size USB receiver. 55Y9003 ann 08/18/09 73P4730 ann 09/15/09 73P4730 ann 09/15/09 73P4730 ann 09/12/07 57Y4635 ann 12/15/09 31P7405 ann 08/27/02	Lenovo Performance BackPack	40Y7696 ann 01/05/06 ics models. 40Y7659 ann 09/20/05 57Y4600 ann 09/20/05 57Y4600 ann 09/22/09 veradapters bo Adapter 41R4493 41R4481 ann 12/18/07 41R4490 ann 01/06/09 com  57Y4294 ann 03/16/10 51J0477 ann 08/18/09 51J0475 ann 08/18/09 41U5253 ann 05/01/07 43R2476 ann 05/13/08 43R2482 ann 05/13/08 43R2482 ann 05/13/08 43R2482 ann 05/13/08 57Y4271 ann 01/07/10 57Y4273 ann 01/07/10 57Y4273 ann 01/07/10 57Y4273 ann 01/07/10 57Y4273 ann 01/07/10 styles and 10/20/09 2572HD6 ann 05/12/09 4014HB6 ann 06/10/10 is-monitors
ThinkPad Mini Dock Plus Series 3 ThinkPad Mini Dock Plus Series 3 - Mobile WS  Keyboard TrackPoint Cap Collection USB Numeric Keypad Preferred Pro USB Keyboard Enhanced Performance USB Keyboard Ultraslim Wireless Keyboard and Mouse <sup>52</sup> 52 Wireless via 2.4GHz technology using a mid ThinkPad USB Keyboard with TrackPoint Lenovo® USB Fingerprint Keyboard Lenovo USB Smartcard Keyboard  Mouse Lenovo Optical Mouse (USB) Lenovo Laser Mouse (USB) ThinkPad USB Laser Mouse	433810U ann 06/23/09 433820U ann 01/07/10  73P2698 ann 12/16/03 33L3225 ann 05/01/00 73P5220 ann 06/21/05 73P2620 ann 03/23/04 57Y4700 ann 09/15/09 cro-size USB receiver. 55Y9003 ann 08/18/09 73P4730 ann 02/22/05 51J0155 ann 03/24/09  06P4069 ann 05/21/03 41U3074 ann 01/23/07	ThinkVision® L1711p 17" Monitor ThinkVision L1900p 19" Monitor ThinkVision L1951p Wide 19" Monitor ThinkVision L2250p Wide 22" Monitor ThinkVision L2251p Wide 22" Monitor ThinkVision L2251x Wide 22" Monitor ThinkVision L2321x Wide 23" Monitor  www.lenovo.com/support/thinkpad/optimu  Monitor Accessories46 Lenovo USB-to-DVI Monitor Adapter DisplayPort to Single-link DVI-D Cable ThinkVision USB Soundbar ThinkVision Soundbar Kensington MicroSaver Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock	4431HE1 ann 11/11/08 2448HB6 ann 10/20/09 2572HB6 ann 10/20/09 2572HB6 ann 10/20/09 2578HB6 ann 10/20/09 4014HB6 ann 06/10/10 Is-monitors 45K5296 ann 05/12/09 45J7915 ann 08/05/08 40Y7616 ann 08/23/05 45K1263 ann 09/16/08 73P2582 ann 12/29/03 45K1620 ann 09/30/08 57Y4303 ann 08/24/10
Lenovo ScrollPoint® Mouse (USB, Optical) ThinkPad Travel Mouse (USB, Optical) ThinkPad Bluetooth Laser Mouse  Multimedia ThinkPad In-Ear Headphones	31P7405 ann 08/27/02 31P7410 ann 06/04/02 41U5008 ann 01/22/08 57Y4488 ann 01/07/10		Vision monitors.
Modem USB 2.0 Lenovo Modem  Security Kensington® MicroSaver® Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock USB Gemplus GemPC Smart Card Reader	43R1814 ann 02/26/08 73P2582 ann 12/29/03 45K1620 ann 09/30/08 57Y4303 ann 08/24/10 41N3040 ann 02/21/06	www.lenovo.com/support/accessories www.lenovo.com/support/notebookacces www.lenovo.com/support/security Other accessories at www.lenovo.com/acce	sories

### ThinkPad<sub>®</sub>



Lenovo® ThinkPad T510



Lenovo ThinkPad T510



ThinkPad Mini Dock Plus Series 3 433810U



ThinkPad Battery 27++ (9-cell, slice) 57Y4545



ThinkPad triple external monitor configuration using NVIDIA's Optimus technology



Lenovo ThinkPad T510

	Ba Type-model Processor (G			Max turbo (GHz)		Wide- screen display	Camera	Disk SATA GB <sup>8</sup> rpm	SATA optical	PCIe Mini Card I 802.11			Blue- tooth			Preload	Avail date
138	4313-28U 4313-CTU	i5-520M i5-560M	2.40 2.66	2.93 3.20	2GB 2GB	15.6" HD 15.6" HD	2.0M 2.0M	250G 5400 320G 7200	DVD±RW DVD±RW	11b/g/n 11b/g/n	None None	None None	None None	6	No No	Pro 32 Pro 64	Jan 10 Sep 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor Memory	Premiere performance; two spindles Intel® Core™ i5 processor i5-520M or i5-560M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache  2GB std / 8GB max² / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in one socket; one socket available	Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64  Preloaded applications <sup>14</sup> (only some listed)
SATA DVD±RW Ultrabay Enhancd SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 250GB³ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	Reścue and Recovery™     Access Connections™     Password Manager     ThinkVantage System Update     ThinkVantage Power Manager
Widescreen display Camera	15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	ThinkVantage Toolbox Microsoft Office 2010 preloaded; purchase product key to activate Roxio® Creator® Business Edition
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display;  Maximum external recolution: 2550/1500 (DisplayPort) @60Hz;	(DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
	Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	Supports ThinkVantage® technologies
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating
Dimensions <sup>3</sup> Weight <sup>2</sup> Case material Battery - type Battery - life <sup>10</sup>	15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm 6-cell: starting at 5.66 lb (2.57kg); 9-cell: starting at 6.01 lb (2.72kg)  Display cover: Glass-fiber reinforced plastic; Base: Carbon-fiber reinforced plastic  Lithium Ion 6-cell, supports optional Slice battery (57Y4545) as 2nd battery at bottom 6-cell: up to 6.2 hr; 9-cell: up to 10.4 hr; 9-cell plus Slice battery: up to 20.8 hr	ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup> via 800-426-7378
Chipset ExpressCard/34	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34)	ThinkPlus™, 22 1-year LOR24 9x5 NBD
Smart Card read Multicard reader		45K5968 ThinkPlus 2-year LOR 9x5 NBD
Ports	Four USB 2.0 (one powered), external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970
PCIe Mini Card	Two PCI Express Mini Card slots	ThinkPlus 4-year LOR 9x5 NBD 45K5973
11b/g/n WWAN upg	11b/g/n wireless⁴, ThinkPad 11b/g/n, PCIe Half Mini Card None	ThinkPlus 5-year LOR 9x5 NBD 45K5975
Modem Bluetooth™	56K V.92 <sup>6</sup> modem None	ThinkPlus 2-year P&L P/U Depot 45K5971
Ethernet Intel AMT	Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT)	ThinkPlus 3-year P&L P/U Depot
Audio support	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button,	45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974
Security	combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole	ThinkPlus 5-year P&L P/U Depot 45K5976
Security chip Fingerprint reader	Trusted Platform Module, TCG 1.2-compliant	Post-warranty annual maintenance
	<sup>2</sup> <b>1-year</b> - depot repair service / service upgrades <sup>22</sup> available	agreements at lenovo.com/thinkplus/warranty

Type-model	Base Processor (GHz	Max turbo (GHz)	Wide- screen z) display	Camera	Disk SATA GB <sup>®</sup> rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN		Avail date
	i5-480M 2.66 i5-480M 2.66									Jan 11 Jan 11

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor  Memory  SATA DVD±RW Ultrabay Enhancd SATA disk	Premiere performance; two spindles Intel® Core™ i5 processor i5-480M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache  2GB or 4GB std / 8GB max² / PC3-8500 1066MHz or PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets  DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 320GB® (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7 Home Premium 64 - Some: Genuine Windows 7 Professional 64  Preloaded applications¹⁴ (only some listed) ■ Rescue and Recovery™ ■ Access Connections™ ■ Password Manager ■ ThinkVantage System Update				
Widescreen display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio  Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio  Camera on top of screen, 2.0-megapixel, fixed focus	ThinkVantage Power Manager ThinkVantage Toolbox Microsoft Office 2010 preloaded; purchase product key to activate Roxio® Creator® Business Edition				
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	(DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)  Supports ThinkVantage® technologies  65-watt AC adapter				
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	ThinkPad Roll Ćage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant				
Dimensions <sup>3</sup> Weight <sup>2</sup> Case material Battery - type Battery - life <sup>10</sup>	15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm 6-cell: starting at 5.66 lb (2.57kg); 9-cell: starting at 6.01 lb (2.72kg)  Display cover: Glass-fiber reinforced plastic; Base: Carbon-fiber reinforced plastic Lithium Ion 6-cell, supports optional Slice battery (57Y4545) as 2nd battery at bottom 6-cell: up to 6.2 hr; 9-cell: up to 10.4 hr; 9-cell plus Slice battery: up to 20.8 hr	RoHS-compliant International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup> via 800-426-7378				
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	ThinkPlus <sup>TM. 22</sup> 1-year LOR <sup>24</sup> 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970				
PCIe Mini Card Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT	Two PCI Express Mini Card slots 11b/g/n wireless <sup>4</sup> , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 Wireless WAN upgradable 56K V.92 <sup>6</sup> modem None Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT)	ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot				
Audio support  Security Security chip Fingerprint reader	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant	45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				

Type-model	Processor		Max turbo (GHz)	Memory (MHz)	Wide- screen display	Disk SATA GB <sup>8</sup> rpr		PCle Mini Card 802.11	PCle Mini Card WWAN	Finger print reader	Blue- tooth		Intel vPro	Preload	Avail date
4314-36U	i5-520M	2.40	2.93	2GBx1 1066	15.6" HD	320G 72	200	WiMAX	WWAN upg	Finger	Blue	6	vPro	Pro 32	Jan 10
4314-2JU	i5-520M	2.40	2.93	2GBx1 1066	15.6" HD	250G 54	400	11b/g/n	WWAN upg	•	Blue	6		Pro 32	Jan 10
4314-9BU	i5-520M	2.40	2.93	2GBx1 1066	15.6" HD	160G 72	200	Intel 6200 <sup>28</sup>	WWAN upg		Blue	9	vPro	Pro 64	May 10
4314-C5U	i5-540M	2.53	3.06	2GBx1 1066	15.6" HD	160G SS	SD	Intel 6200	WWAN upg	Finger	Blue	9	vPro	Pro 64	Jul 10
4314-DDU	i5-560M	2.66	3.20	2GBx1 1066	15.6" HD	320G 72	200	Intel 6200	WWAN upg	•	Blue	6	vPro	Pro 64	Sep 10
4314-DPU	i7-620M	2.66	3.33	4GBx1 1333	15.6" HD+	500G 72	200	Intel 1000	WWAN upg		Blue	6		Pro 64	Jan 11

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   These models have a depot repair service 3-year limited warranty
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Premiere performance; two spindles Intel® Core™ i5 processor i5-520M, i5-540M, or i5-560M with dual-core, or Intel Core i7 processor i7-620M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; i5-520M/i5-540M/i5-560M: 3MB cache; i7-620M: 4MB cache	Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64 Preloaded applications¹⁴ (only some			
Memory	<b>2GB</b> or <b>4GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz or PC3-10600 1333MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	listed)  ■ Rescue and Recovery™			
SATA DVD±RW Ultrabay Enhance SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable 10 One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access Some: 160GB <sup>8</sup> Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high Some: 160GB (7200 rpm), 250GB (5400 rpm), 320GB (7200 rpm), or 500GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive	<ul> <li>Access Connections<sup>™</sup></li> <li>Password Manager</li> <li>Fingerprint Software (fingerprint models)</li> <li>ThinkVantage System Update</li> <li>ThinkVantage Power Manager</li> <li>ThinkVantage Toolbox</li> </ul>			
Widescreen display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio  Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio	<ul> <li>Norton™ Internet Security 2011 (30 days of virus definitions)</li> <li>Adobe® Reader®</li> <li>Adobe Flash® Player</li> <li>Windows Live™ Toolbar</li> </ul>			
Camera Integrated graphics	Camera on top of screen, 2.0-megapixel, fixed focus  Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort) @ 60Hz; 2048x1536 (VGA) @ 75Hz; 1920x1200 @ 60Hz (single-link DVI-D via cable 45J7915)	Skype™ for Windows     Microsoft Office 2010 preloaded; purchase product key to activate     Microsoft Research AutoCollage Touch     Roxio® Creator® Business Edition (DVD±RW)			
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Řoxio MyĎVD® (DVD±RW)     Corel® WinDVD® (DVD±RW)			
Dimensions <sup>3</sup> Weight <sup>2</sup> Case material Battery - type Battery - life <sup>10</sup>	15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm 6-cell: starting at 5.66 lb (2.57kg); 9-cell: starting at 6.01 lb (2.72kg)  Display cover: Glass-fiber reinforced plastic; Base: Carbon-fiber reinforced plastic Lithium lon 6-cell or 9-cell, supports optional Slice battery (57Y4545) as 2nd battery 6-cell: up to 6.2 hr; 9-cell: up to 10.4 hr; 9-cell plus Slice battery: up to 20.8 hr				
Chipset ExpressCard/34	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34)				
Smart Card read Multicard reader Ports	None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	Supports ThinkVantage® technologies  65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame)			
PCIe Mini Card 11b/g/n Intel 1000 Intel 6200 <sup>28</sup> WiMAX WWAN upq	Two PCI Express Mini Card slots  Some: 11b/g/n wireless <sup>4</sup> , ThinkPad 11b/g/n, PCIe Half Mini Card  Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2  Some: 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2  Some: 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX  Wireless WAN upgradable	EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹7 24 hour x 7 day¹8 toll-free support during the warranty period¹2 via 800-426-7378			
Modem Bluetooth™ Ethernet	56K V.92 <sup>6</sup> modem  Bluetooth 2.1 wireless, LED indicator  Non-vPro model: Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1  vPro model: Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1	ThinkPlus™.22 3-year LOR24 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022			
Intel AMT Audio support	Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic iack	ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot			
Security Security chip Fingerprint reade	Power On Authentication, supports the security chip	45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance			
Limited warranty <sup>12</sup>	<sup>2</sup> 3-years/1-yr - battery depot repair service / service upgrades <sup>22</sup> available	agreements at lenovo.com/thinkplus/warranty			

Base Type-model Processor (GHz)	Max turbo (GHz)	Memory	Wide- screen display	Camera	Disk SATA GB <sup>8</sup> rpm	PCle Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader		Bat- tery Intel cells vPro		Avail date
4314-DFU i5-560M 2.66	3 20	2GB	15 6" HD+	2.0M	320G 7200	Intel 6200 <sup>28</sup>	WWAN una	None	Blue	9 vPro	Pro 64	Sep 10

- This small and medium business (SMB) model is part of the US TopSeller™ Program
   This model has a depot repair service 3-year limited warranty
   This system is Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Premiere performance; two spindles Intel® Core™ i5 processor i5-560M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Genuine Windows® 7 Professional 64 Preloaded applications <sup>14</sup> (only some				
Memory	<b>2GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	isted)  Rescue and Recovery™  Access Connections™				
SATA DVD±RW Ultrabay Enhancd SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <b>320GB</b> <sup>8</sup> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	Password Manager     ThinkVantage System Update     ThinkVantage Power Manager     ThinkVantage Toolbox     Norton™ Internet Security 2011				
Widescreen display Camera	15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	(30 days of virus definitions)  • Adobe® Reader®  • Adobe Flash® Player  • Windows Live™ Toolbar				
Optimus graphics <sup>37</sup>	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics in processor, and NVIDIA Quadro® NVS3100M, PCI Express® x16, 512MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	Skype™ for Windows     Microsoft Office 2010 preloaded; purchase product key to activate     Microsoft Research AutoCollage Touch     Roxio® Creator® Business Edition (DVD±RW)     Roxio MyDVD® (DVD±RW)				
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Corel® WinDVD® (DVD±RW)				
Dimensions <sup>3</sup> Weight <sup>2</sup> Case material Battery - type Battery - life <sup>10</sup>	15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm 6-cell: starting at 5.66 lb (2.57kg); 9-cell: starting at 6.01 lb (2.72kg) Display cover: Glass-fiber reinforced plastic; Base: Carbon-fiber reinforced plastic Lithium Ion 9-cell, supports optional Slice battery (57Y4545) as 2nd battery at bottom 6-cell: up to 6.1 hr; 9-cell plus Slice battery: up to 20.7 hr	Supports ThinkVantage® technologies  90-watt AC adapter ThinkPad Roll Cage (one-piece				
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹7 24 hour x 7 day¹8 toll-free support during the warranty period¹2				
PCIe Mini Card Intel 6200 <sup>28</sup> WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support  Security Security chip Fingerprint reade		via 800-426-7378  ThinkPlus™.22 3-year LOR24 9x5 NBD 45K6021  ThinkPlus 4-year LOR 9x5 NBD 45K6022  ThinkPlus 5-year LOR 9x5 NBD 45K6024  ThinkPlus 4-year P&L P/U Depot 45K6023  ThinkPlus 5-year P&L P/U Depot 45K6025  Post-warranty annual maintenance agreements at				
Limited warranty	3-years/1-yr - battery depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty				

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	SATA optical	PCIe Mini Card 802.11	PCle Mini Card WWAN	Finger print reader			Intel vPro Preload	Avail I date	
4313-29U	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	320G 7200	DVD±RW	11b/g/n	None	None	Blue	9	No Pro 32	Feb 10	1

- This small and medium business (SMB) model is part of the US TopSeller™ Program This system is Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Premiere performance; two spindles Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Genuine Windows <sup>®</sup> 7 Professional 32 Preloaded applications <sup>14</sup> (only some
Memory	<b>2GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	isted)  ■ Rescue and Recovery™  ■ Access Connections™
SATA DVD±RW Ultrabay Enhancd SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <b>320GB</b> <sup>8</sup> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	Password Manager     ThinkVantage System Update     ThinkVantage Power Manager     ThinkVantage Toolbox     Adobe® Reader®
Widescreen display Camera	15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	Skype™ for Windows     Microsoft Office 2010 preloaded; purchase product key to activate     Roxio® Creator® Business Edition
Discrete graphics	NVIDIA® Quadro® NVS3100M, PCI Express® x16, 512MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort) @ 60Hz;	(DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
	2048x1536 (VGA)@85Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	Supports ThinkVantage® technologies
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating
Dimensions <sup>3</sup> Weight <sup>2</sup> Case material Battery - type Battery - life <sup>10</sup>	15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm 6-cell: starting at 5.66 lb (2.57kg); 9-cell: starting at 6.01 lb (2.72kg)  Display cover: Glass-fiber reinforced plastic; Base: Carbon-fiber reinforced plastic Lithium lon 9-cell, supports optional Slice battery (57Y4545) as 2nd battery at bottom 6-cell: up to 4.7 hr; 9-cell: up to 7.8 hr; 9-cell plus Slice battery: up to 15.6 hr	ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup> via 800-426-7378
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	ThinkPlus™.22 1-year LOR24 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970
PCIe Mini Card 11b/g/n WWAN upg Modem Bluetooth™ Ethernet Intel AMT	Two PCI Express Mini Card slots 11b/g/n wireless <sup>4</sup> , ThinkPad 11b/g/n, PCIe Half Mini Card None 56K V.92 <sup>6</sup> modem Bluetooth 2.1 wireless, LED indicator Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT)	ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972
Audio support  Security Security chip Fingerprint reader	High Definition (HĎ) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None  1-year - depot repair service / service upgrades <sup>22</sup> available	ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Entition warranty	1-year - dopot repair service / service apgrades - available	ichovo.com/minkplus/warranty

Type-model	Processor		Max turbo (GHz)	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-		Intel	Preload	Avail date
4314-2MU	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	250G 5400	Intel 1000	WWAN upg			9		Pro 32	Feb 10
4314-2PU	i5-540M	2.53	3.06	4GB	15.6" HD+	2.0M	500G 7200	Intel 6200 <sup>28</sup>	WWAN upg	Finger	Blue	9	vPro	Pro 32	Feb 10
4314-7QU	i5-520M	2.40	2.93	4GB	15.6" HD+	2.0M	320G 7200	Intel 6200	WWAN upg	Finger	Blue	9	vPro	Pro 64	Mar 10
4314-7RU	i5-540M	2.53	3.06	4GB	15.6" HD+	2.0M	128G SSD	Intel 6200	WWAN upg	Finger	Blue	9	vPro	Pro 64	Mar 10
4314-9CU	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	160G 7200	Intel 6200	WWAN upg	•	Blue	9	vPro	Pro 64	May 10
4314-9DU	i5-540M	2.53	3.06	2GB	15.6" HD+	2.0M	160G 7200	Intel 6200	WWAN upg		Blue	9	vPro	Pro 64	May 10
₹ 4314-C4U	i5-540M	2.53	3.06	2GB	15.6" HD	2.0M	160G SSD	Intel 6200	WWAN upg	Finger	Blue	9	vPro	Pro 64	Jul 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These models have a depot repair service 3-year limited warranty
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Premiere performance; two spindles Intel® Core™ i5 processor i5-520M or i5-540M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7			
Memory	<b>2GB</b> or <b>4GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; standard memory in one socket; one socket available	Professional 64  Preloaded applications¹⁴ (only some listed)  • Rescue and Recovery™			
SATA DVD±RW Ultrabay Enhancd SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access Some: 128GB³ or 160GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high Some: 160GB (7200 rpm), 250GB (5400 rpm), 320GB (7200 rpm), or 500GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™  All: removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive	models) ThinkVantage System Update ThinkVantage Power Manager ThinkVantage Toolbox			
Widescreen display  Camera	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio  Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio  Camera on top of screen, 2.0-megapixel, fixed focus	<ul> <li>Norton™ Internet Security 2011 (30 days of virus definitions)</li> <li>Adobe® Reader®</li> <li>Adobe Flash® Player</li> <li>Windows Live™ Toolbar</li> </ul>			
Discrete graphics	NVIDIA® Quadro® NVS3100M, PCI Express® x16, 512MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	<ul> <li>Skype™ for Windows</li> <li>Microsoft Office 2010 preloaded; purchase product key to activate</li> <li>Microsoft Research AutoCollage Touch</li> <li>Roxio® Creator® Business Edition (DVD±RW)</li> </ul>			
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Roxio MyĎVD® (DVD±RW)     Corel® WinDVD® (DVD±RW)			
Dimensions <sup>3</sup> Weight <sup>2</sup> Case material Battery - type Battery - life <sup>10</sup>	15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm 6-cell: starting at 5.66 lb (2.57kg); 9-cell: starting at 6.01 lb (2.72kg)  Display cover: Glass-fiber reinforced plastic; Base: Carbon-fiber reinforced plastic Lithium lon 9-cell, supports optional Slice battery (57Y4545) as 2nd battery at bottom 6-cell: up to 4.7 hr; 9-cell: up to 7.8 hr; 9-cell plus Slice battery: up to 15.6 hr	Companie Think/orthon # tasks also in			
Chipset	Mobile Intel QM57 Express Chipset	Supports ThinkVantage® technologies			
ExpressCard/34 Smart Card read Multicard reader Ports	One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant			
PCIe Mini Card Intel 1000 Intel 6200 <sup>28</sup> WWAN upg	Two PCI Express Mini Card slots  Some: 11b/g/n wireless <sup>4</sup> , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2  Some: 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6200, 2x2  Wireless WAN upgradable	International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup> via 800-426-7378			
Modem Bluetooth™ Ethernet	56K V.92 <sup>6</sup> modem Some: Bluetooth 2.1 wireless, LED indicator Non-vPro model: Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 vPro model: Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1	ThinkPlus™. <sup>22</sup> 3-year LOR <sup>24</sup> 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022			
Intel AMT Audio support	Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot			
Security Security chip Fingerprint reader	Power On Authentication, supports the security chip	45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at			
Limited warranty <sup>12</sup>	3-years/1-yr - battery depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty			

Type-model	Processor	GHz	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN					Preload	Avail date
4313-C2U	i3-370M	2.40	2GB	15.6" HD	2.0M	250G 5400	DVD±RW	Intel 1000	None	Finger	Blue	6	No	Pro 64	Jul 10
4313-C3U	i3-370M	2.40	2GB	15.6" HD	2.0M	320G 7200	DVD±RW	Intel 1000	None	Finger	Blue	6	No	Pro 64	Jul 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	Premiere performance: two spindles	Duele adad an evetime acceptance
Processor	Intel® Core™ i3 processor i3-370M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Genuine Windows 7 Professional 64
Memory	2GB std / 8GB max <sup>7</sup> / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed)  • Rescue and Recovery™  • Access Connections™
SATA DVD±RW Ultrabay Enhancd SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <b>250GB</b> <sup>8</sup> (5400 rpm) or <b>320GB</b> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	<ul> <li>Password Manager</li> <li>Fingerprint Software</li> <li>ThinkVantage System Update</li> <li>ThinkVantage Power Manager</li> <li>ThinkVantage Toolbox</li> </ul>
Widescreen display Camera	15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	Adobe® Reader®     Adobe Flash® Player     Microsoft Office 2010 preloaded; purchase product key to activate
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	Roxio® Creator® Business Edition (DVD±RW)     Roxio MyDVD® (DVD±RW)     Corel® WinDVD® (DVD±RW)  Supports ThinkVantage® technologies
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating
Dimensions <sup>3</sup> Weight <sup>2</sup> Case material Battery - type Battery - life <sup>10</sup>	15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm 6-cell: starting at 5.66 lb (2.57kg); 9-cell: starting at 6.01 lb (2.72kg) Display cover: Glass-fiber reinforced plastic; Base: Carbon-fiber reinforced plastic Lithium Ion 6-cell, supports optional Slice battery (57Y4545) as 2nd battery at bottom 6-cell: up to 6.2 hr; 9-cell: up to 10.4 hr; 9-cell plus Slice battery: up to 20.8 hr	ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup>
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	via 8ŏ0-426-7378  ThinkPlus <sup>TM, 22</sup> 1-year LOR <sup>24</sup> 9x5 NBD
PCIe Mini Card Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n wireless <sup>4</sup> , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 None 56K V.92 <sup>6</sup> modem Bluetooth 2.1 wireless, LED indicator Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at
Limited warranty <sup>12</sup>	1-year - depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty





Lenovo® ThinkPad W510



Lenovo ThinkPad W510



ThinkPad Mini Dock Plus Series 3 - Mobile WorkStation 433820U



ThinkPad 135W AC Adapter 55Y9317



Lenovo ThinkPad W510



Lenovo ThinkPad W510

	Max Base turbo (GHz) (GHz) Memory (MHz)		SATA	PCIe Mini Card RAID 802.11	PCIe Mini Card WWAN		Intel vPro Preload	Avail date			
4319-2PU i7-720QM 4319-2QU i7-720QM 4319-2RU i7-820QM 4319-4BU i7-720QM 4319-4MU i7-720QM ■ 4319-64U i7-720QM	1 1.60 2.80 2GBx1 1066 1 1.60 2.80 2GBx2 1066 1 1.60 2.80 2GBx2 1066 1 1.73 3.06 2GBx2 1066 1 1.60 2.80 2GBx2 1066 1 1.60 2.80 2GBx2 1066 1 1.60 2.80 2GBx1 1066 1 1.60 2.80 2GBx1 1066	15.6" FHD 15.6" FHD 15.6" FHD <i>Multi</i> 15.6" FHD 15.6" HD+ 15.6" HD+	320G 7200 M 320G 7200 M 320G 7200 M 320G 7200 M 320G 7200 M	None Intel 6300 None Intel 6300 None Intel 6300 None Intel 6300 None Intel 6300 None Intel 6300	Gobi 2000 WWAN up Gobi 2000 Gobi 2000 WWAN up	og X-Rite of AT&T <sup>23</sup> of AT&T	vPro Pro 32 vPro Pro 64 vPro Pro 64 vPro Pro 64 vPro Pro 64 vPro Pro 64 vPro Pro 64	Jan 10 Jan 10 Jan 10 Feb 10 Mar 10			
	Power-packed engineering v These systems are Microso										
Processor Int DN Int	obile workstation; two spindl tel® Core™ i7 processor i7· II (Direct Media Interface), i tel Turbo Boost, Hyper-Threa -720QM: 6MB cache; i7-820	-720QM or i7-82 ntegrated DDR3 ading technology	memory contr ;		-	Preloaded opera Some: Genuine Professi Some: Genuine Professi	e Windows® 7 ional 32 e Windows 7				
	<b>GB</b> or <b>4GB</b> std / 16GB max <sup>7</sup> al-channel capable, four 204			on-parity,		Preloaded applic	ations14 (only	y some			
Ultrabay Enhancd Or SATA disk 32 SA	/D burner, SATA 1.5Gb/s, 12 ne bay for removable device: <b>0GB</b> <sup>8</sup> (7200 rpm) / ATA 3.0Gb/s, 2.5" wide, 9.5m nock Mounted Hard Drive, A	s, Ultrabay Slim- nm high, removal	compatible, 12 ble, upgradable	2.7mm high, botto	m access	Rescue and Recovery™					
Widescreen So display So	nme: 15.6" (396mm) HD+ ( 220 nits, 16:9 aspect r 270 nits, 16:9 aspect r 270 nits, 16:9 aspect r 270 nits, 16:9 aspect r 242 nits, 16:9 aspect r MultiTouch (touchscre	1600x900) color atio, 500:1 contri 1920x1080) color atio, 500:1 contri 1920x1080) color atio, 500:1 contri	r, anti-glare, <b>LE</b> ast ratio, 60% or, anti-glare, <b>L</b> ast ratio, 95% or, anti-glare, <b>L</b> ast ratio, 95%	Gamut  LED backlight, Gamut  LED backlight,		ThinkVantage S ThinkVantage F ThinkVantage T ThinkVantage T Norton™ International State (30 days of virue) Adobe® Reader Adobe Flash® F Windows Live™	Power Manage Toolbox et Security 20 s definitions) Player	er 011			
Color calibration So Camera Ca	ome: huey™PRO Colorimeto amera on top of screen, 2.0-	er by X-Rite® col	or calibration s	sensor in palm res	st (	<ul> <li>Skype™ for Win</li> </ul>	ndows	ded:			
graphics exi dig su <i>Ma</i>	VIDIA® Quadro® FX880M, P ternal analog monitor suppo gital monitor support via Dis pports dual independent dis aximum external resolution: 48x1536 (VGA)@85Hz; 192	ort via VGA DB-1 playPort (suppor play; 2560x1600 (Dis	5 connector arts single-link D	nd IVI-D via cable 45 Hz:	5J7915);	<ul> <li>Microsoft Office 2010 preloaded; purchase product key to activate</li> <li>Microsoft Research AutoCollage Touch</li> <li>Roxio® Creator® Business Edition (DVD±RW)</li> <li>Roxio MyDVD® (DVD±RW)</li> </ul>					
TrackPoint® Tra Touchpad Ult	-key, ThinkVantage button, s ackPoint® pointing device, "P traNav™, wide touchpad bel ıminates the keyboard to im	ress-to-Select," ow keybrd, Tap Z	Internet Scroll Zones, scrolling	Bar <sup>13</sup> , magnifying g regions label, m	giuoo i	Corel® WinDVD huey™PRO Mo Correction by P (color calibratio	nitor Color 'antone®/X-Rit				
(WxDxH) <sup>3</sup> FH FH Weight <sup>2</sup> 6-c Case material Dis Battery - type Litl	D+: 14.68" x 9.6:  AD: 14.68" x 9.6:  AD: MultiTouch: 14.68" x 9.6:  Seplay cover: Glass-fiber reir  hium lon <b>9-cell</b> , supports op  cell: up to 3.0 hr; <i>9-cell</i> : up to	5" x 1.29-1.44"; 3 5" x 1.35-1.57"; 3 kg); <i>9-cell:</i> startir nforced plastic; <i>I</i> ttional Slice batte	372.8mm x 245 372.8mm x 245 ng at 6.01 lb (2 3 <i>ase:</i> Carbon- ery (57Y4545)	.72kg) fiber reinforced p as 2nd battery at	6mm 8mm						
	obile Intel QM57 Express ( ne slot (ExpressCard/34)	Chipset				Supports ThinkVa	antage® techn	ologies			
Smart Card Read No Multicard Reader 5-i Ports Tw ext		SB 2.0, one USE DisplayPort), mo	3 2.0/eSÁTA co odem (RJ-11),	mbo port, ethernet (RJ-45)	,	135-watt AC adap ThinkPad Roll Ca magnesium fra EPEAT™ Gold raf ENERGY STAR®	ige (one-piece me) ting				
Intel 6300 <sup>28</sup> 11: WWAN upg So Gobi™ 2000 So	no PCI Express Mini Card slo a/b/g/n wireless <sup>4</sup> , PCIe Half ome: Wireless WAN upgrad ome: Wireless WAN, Qualco GPRS/WCDMA/HSPA	Mini Card, Intel ( able omm chipset, PC , GPS, contract	le Mini Card, E required with s	EV-DO Rev. A,		RoHS-compliant International War 24 hour x 7 day <sup>18</sup> during the warr via 800-426-73	toll-free supp ranty period <sup>12</sup> 378	oort			
Modem 56 Bluetooth™ Bluethernet Intel AMT Intel AMT Audio support Higgs coolses	ome: AT&T®, contract requir K V.928 modem uetooth 2.1 wireless, LED in tel 82577LM Gigabit Networkel Active Management Tech gh Definition (HD) Audio, Coeaker volume up, down and mbo audio/mic jack wer-on password, hard disk	dicator k Connection (Hanology (iAMT) onexant 20585 co mute buttons / d password, supe	anksville), PH\ odec / stereo s lual array micr	peakers, 1 watt x ophone, mic mute	2 / e button,	ThinkPlus™.22 3-y ThinkPlus 4-year ThinkPlus 5-year ThinkPlus 4-year ThinkPlus 5-year	41C: LOR 9x5 NBI 41C: LOR 9x5 NBI 41C: P&L P/U Dep 41C:	9176 D 9177 D 9179 oot 9178			
Security chip Tru Fingerprint reader UF Po	usted Platform Module, TCG PEK Fingerprint reader on power On Authentication, sup- years/1-yr battery - depot re	i 1.2-compliant alm rest, swipe s ports the security	ensor, LED ind chip	dicator,		Post-warranty anr agreements at lenovo.com/t	41Ċ nual maintena	9180 ance			

	Type-model	Processor		Max turbo (GHz)	Memory (	(MHz)	Wide- screen display	Disk SATA GB <sup>®</sup> rpm	RAID	PCle Mini Card 802.11	PCle Mini Card WWAN	Color calib	Bat- tery cells	Intel vPro	Preload	Avail date
	4319-5RU	i5-520M	2.40	2.93	2GBx1	1066	15.6" HD+	320G 7200	None	Intel 6300 <sup>28</sup>	WWAN upg	None	9		Pro 64	Jul 10
	4319-5SU	i7-620M	2.66	3.33	2GBx2	1066	15.6" FHD	320G 7200	None	Intel 6300	WWAN upg	None	9		Pro 64	Jul 10
133	4319-5XU	i5-560M	2.66	3.20	4GBx1	1333	15.6" HD+	320G 7200	None	Intel 6200 <sup>28</sup>	WWAN upg	None	6	vPro	Pro 64	Sep 10
133	4319-65U	i5-560M	2.66	3.20	2GBx1	1066	15.6" HD+	320G 7200	None	Intel 6300	WWAN upg	None	9	vPro	Pro 64	Sep 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   Power-packed engineering with Open GL graphics and ISV certifications
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Mobile workstation; two spindles Intel® Core™ i5 processor i5-520M or i5-560M with dual-core, or Intel Core i7 processor i7-620M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; i5-520M/i5-560M: 3MB cache; i7-620M: 4MB cache	Preloaded operating system <sup>20</sup> - Genuine Windows <sup>®</sup> 7 Professional 64  Preloaded applications <sup>14</sup> (only some listed)
Memory	<b>2GB</b> or <b>4GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz or PC3-10600 1333MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	<ul> <li>Rescue and Recovery™</li> <li>Access Connections™</li> <li>Password Manager</li> </ul>
SATA DVD±RW Ultrabay Enhancd SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <b>320GB</b> <sup>8</sup> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, Shock Mounted Hard Drive, Active Protection System™	<ul> <li>Fingerprint Software (fingerprint models)</li> <li>ThinkVantage System Update</li> <li>ThinkVantage Power Manager</li> <li>ThinkVantage Toolbox</li> </ul>
Widescreen display	Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut Some: 15.6" (396mm) FHD (1920x1080) color, anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut	<ul> <li>Norton™ Internet Security 2011 (30 days of virus definitions)</li> <li>Adobe® Reader®</li> <li>Adobe Flash® Player</li> <li>Windows Live™ Toolbar</li> </ul>
Color calibration Camera	None Camera on top of screen, 2.0-megapixel, fixed focus	<ul> <li>Skype<sup>™</sup> for Windows</li> </ul>
Discrete graphics	NVIDIA® Quadro® FX880M, PCI Express® x16, 1GB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display;  Maximum external resolution: 2560x1600 (DisplayPort) @ 60Hz; 2048x1536 (VGA) @ 85Hz; 1920x1200 @ 60Hz (single-link DVI-D via cable 45J7915)	<ul> <li>Microsoft Office 2010 preloaded; purchase product key to activate</li> <li>Microsoft Research AutoCollage Touch</li> <li>Roxio® Creator® Business Edition (DVD±RW)</li> <li>Roxio MyDVD® (DVD±RW)</li> </ul>
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Corel® WinDVD® (DVD±RW)
Dimensions (WxDxH) <sup>3</sup> Weight <sup>2</sup> Case material Battery - type Battery - life <sup>10</sup>	HD+: 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm FHD: 14.68" x 9.65" x 1.29-1.44"; 372.8mm x 245.1mm x 32.8-36.6mm 6-cell: starting at 5.66 lb (2.57kg); 9-cell: starting at 6.01 lb (2.72kg) Display cover: Glass-fiber reinforced plastic; Base: Carbon-fiber reinforced plastic Lithium Ion 6-cell or 9-cell, supports optional Slice battery (57Y4545) as 2nd battery 6-cell: up to 3.0 hr; 9-cell: up to 5.1 hr; 9-cell plus slice battery: up to 10.5 hr	
Chipset	Mobile Intel QM57 Express Chipset	Supports ThinkVantage® technologies
ExpressCard/34 Smart Card Read	One slot (ExpressCard/34)	135-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant
PCIe Mini Card Intel 6200 <sup>28</sup> Intel 6300 <sup>28</sup> WWAN upg	Two PCI Express Mini Card slots Some: 11a/b/g/n wireless <sup>4</sup> , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Some: 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3 Wireless WAN upgradable	International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup> via 800-426-7378
Modem Bluetooth™ Ethernet	56K V.92 <sup>6</sup> modem Bluetooth 2.1 wireless, LED indicator Non-vPro model: Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1	ThinkPlus™.22 3-year LOR24 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD
Intel AMT Audio support	vPro model: Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button,	41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot
Security Security chip Fingerprint reader	combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance
Limited warrantul?	3-years/1-yr battery - depot repair service / service upgrades <sup>22</sup> available	agreements at lenovo.com/thinkplus/warranty

## ThinkPad® T510, W510 Accessories

Memory 1GB PC3-8500 DDR3 Low-Halogen SODIMM 1GB PC3-8500 DDR3 L-H SODIMM (25Pack) 2GB PC3-8500 DDR3 Low-Halogen SODIMM 2GB PC3-8500 DDR3 L-H SODIMM (25Pack) 4GB PC3-8500 DDR3 L-H SODIMM 1GB PC3-10600 DDR3 L-H SODIMM 1GB PC3-10600 DDR3 L-H SODIMM 2GB PC3-10600 DDR3 L-H SODIMM	57Y4385 ann 06/23/09 55Y3707 ann 06/23/09 57Y4386 ann 06/23/09 55Y3708 ann 06/23/09 55Y3709 ann 03/02/10 55Y3710 ann 03/02/10	Security Kensington® MicroSaver® Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock USB Gemplus GemPC Smart Card Reader  Batteries ThinkPad Battery 55+ (6-cell) ThinkPad Battery 55++ (9-cell) ThinkPad Battery 27++ (9-cell, slice) <sup>43</sup> 43 To be used along with system battery for a attaches under ThinkPad using docking con	57Y4185 ann 03/30/10 57Y4186 ann 03/30/10 57Y4545 ann 01/07/10 all-day computing;
<b>Ultrabay Slim 9.5mm</b> Serial ATA Hard Drive Bay Adapter III <sup>48</sup>	43N3412 ann 06/23/09	(not supported when using Series 3 Port Re ThinkPad External Battery Charger	eplicator or Docks). 40Y7625 <i>ann 09/20/05</i>
Ultrabay Enhanced 12.7mm DVD Burner Ultrabay Enhanced II SATA Blu-ray Reader / DVD Burner Ultrabay Enh	43N3294 ann 01/07/10 43N3295 ann 01/07/10	More information at www.lenovo.com/allday T510: ThinkPad 65W AC Adapter <sup>45</sup> <sup>45</sup> Only compatible with the integrated graph	40Y7696 ann 01/05/06
Storage and removable storage 160GB Disk SATA 3.0Gb/s (7200 rpm) <sup>41</sup> 250GB Disk SATA 3.0Gb/s (5400 rpm) <sup>41</sup> 250GB Disk SATA 3.0Gb/s (5400 rpm) <sup>41</sup> 320GB Disk SATA 3.0Gb/s (5400 rpm) <sup>41</sup> 320GB Disk SATA 3.0Gb/s (7200 rpm) <sup>41</sup> 500GB Disk SATA 3.0Gb/s (7200 rpm) <sup>41</sup> 41 Can be used as the main HDD or	41N5737 ann 10/16/07 43R8152 ann 01/15/08 43N3410 ann 01/20/09 43N3403 ann 08/05/08 43N3411 ann 01/20/09 43N3423 ann 01/07/10	ThinkPad 90W AC Adapter Lenovo Power Hub 90W Ultraslim AC/DC Combo Adapter Charging tips for 90W Ultraslim AC/DC Com. •iPod and iPhone Charge Tip (L10a) •Generic Micro USB charge tip (L18) More information at www.lenovopowertips.	40Y7659 ann 09/20/05 57Y4600 ann 09/07/10 41R4493 ann 09/22/09 bo Adapter 41R4493 41R4481 ann 12/18/07 41R4490 ann 01/06/09
with Serial ATA Hard Drive Bay Adapter III 43	N3412 in the Ultrabay	14/510.	
128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover) 256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover) ThinkPad 160GB Intel X25-M SSD <sup>41</sup>	43N3406 ann 08/26/08 43N3417 ann 06/23/09 43N3435 ann 06/22/10	W510: ThinkPad 135W AC Adapter  More info at www.lenovo.com/support/pow	55Y9317 ann 01/07/10
USB 2.0 Portable 320GB Hard Disk USB 2.0 Portable 500GB Hard Disk USB 2.0 Portable Secure 160GB Hard Disk USB 2.0 Portable Secure 320GB Hard Disk eSATA/USB 2.0 Secure 500GB Hard Drive USB 2.0 Portable DVD Burner	45K1689 ann 03/17/09 45K1690 ann 05/26/09 43R2018 ann 11/18/08 43R2019 ann 11/18/08 57Y4400 ann 01/07/10 43N3264 ann 01/05/10	Carrying Cases Up to 15.6" widescreen models: ThinkPad 15W Case Sleeve Lenovo Business Messenger Case Lenovo Messenger Max Lenovo Performance BackPack ThinkPad Business Backpack	51J0477 ann 08/18/09 51J0475 ann 08/18/09 41U5253 ann 05/01/07 41U5254 ann 05/01/07 43R2482 ann 05/13/08
Wireless WAN (Mini PCI Express)  Only WWAN upgradable models:  ThinkPad Gobi™ 2000 Broadband Option	78Y1399 ann 01/07/10	More information at www.lenovo.com/supp	
ThinkPad AT&T® Gobi 2000 Broadband Option  ThinkPad Expansion	78Y1398 ann 01/07/10	Monitors Lenovo L2230x Wide 21.5" Monitor	5453HB1 ann 06/10/10 5047HB2 ann 10/20/09
Tiblication and Expansion Tiblication Series 3 ThinkPad Mini Dock Series 3 ThinkPad Mini Dock Plus Series 3 All:	433610W ann 06/23/09 433710U ann 06/23/09 433810U ann 06/23/09	ThinkVision® L1711p 17" Monitor ThinkVision L1900p 19" Monitor ThinkVision L1951p Wide 19" Monitor ThinkVision L2250p Wide 22" Monitor ThinkVision L2251p Wide 22" Monitor ThinkVision L2251x Wide 22" Monitor ThinkVision L2321x Wide 23" Monitor	4431HE1 ann 11/11/08 4431HE1 ann 11/11/08 2448HB6 ann 10/20/09 2572HB6 ann 10/20/09 2578HB6 ann 10/20/09 4014HB6 ann 06/10/10
Lenovo® Essential Notebook Stand USB Port Replicator with Digital Video ThinkPad Mini Dock Plus Series 3 - Mobile WS	45J9292 ann 05/12/09 45K1610 ann 07/28/09 433820U ann 01/07/10	www.lenovo.com/support/thinkpad/optimu	
Keyboard TrackPoint Cap Collection USB Numeric Keypad Preferred Pro USB Keyboard Enhanced Performance USB Keyboard Ultraslim Wireless Keyboard and Mouse <sup>52</sup> <sup>52</sup> Wireless via 2.4GHz technology using a mid ThinkPad USB Keyboard with TrackPoint Lenovo® USB Fingerprint Keyboard Lenovo USB Smartcard Keyboard	73P2698 ann 12/16/03 33L3225 ann 05/01/00 73P5220 ann 06/21/05 73P2620 ann 03/23/04 57Y4700 ann 09/15/09	Monitor Accessories <sup>46</sup> Lenovo USB-to-DVI Monitor Adapter Lenovo DisplayPort to VGA Monitor Cable DisplayPort to Single-link DVI-D Cable ThinkVision USB Soundbar ThinkVision Soundbar Kensington MicroSaver Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock Lenovo Easy Reach Monitor Stand  46 Compatible on selected Lenovo and Think  Many information of August Le	
Mouse Lenovo Optical Mouse (USB) Lenovo Laser Mouse (USB) ThinkPad USB Laser Mouse Lenovo ScrollPoint® Mouse (USB, Optical) ThinkPad Travel Mouse (USB, Optical) ThinkPad Bluetooth Laser Mouse	06P4069 ann 05/21/03 41U3074 ann 01/23/07 57Y4635 ann 12/15/09 31P7405 ann 08/27/02 31P7410 ann 06/04/02 41U5008 ann 01/22/08	More information at www.lenovo.com/supp  For more information on ThinkPad accessoric www.lenovo.com/support/accessories www.lenovo.com/support/notebookacces www.lenovo.com/support/security	es, please visit:
<b>Multimedia</b> ThinkPad In-Ear Headphones	57Y4488 ann 01/07/10	Other accessories at www.lenovo.com/acc Accessories Guide pdf at www.lenovo.com/a	









Lenovo ThinkPad W701 with ThinkPad W700 Mini Dock 2.0 57Y4345



ThinkPad W700 Mini Dock 2.0 57Y4345



ThinkPad Battery 37++ (9-cell) 45J7914



Lenovo ThinkPad W701



Lenovo ThinkPad W701

Type-model Processor Memory (MHz)	Widescreen display	Discrete graphics	Disk(s) SATA GB <sup>®</sup> rpm	RAID	SATA optical	PCle Mini Card 802.11	Card slot	Color calib/ Digitize	Adapte		Avail date
2500-3AU i7-720QM 2GBx1 1066	17" WXGA+	FX2800M	1x320G 7200	) No	DVD±RW	Intel 6300 <sup>28</sup>	Exp 5	54	230W	vPro Pro 64	Mar 10
2500-3BU i7-820QM 2GBx2 1066	17" WUXGA	FX2800M	1x320G 7200	ON C	DVD±RW	Intel 6300	Smar	t Yes	230W	vPro Pro 64	Mar 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Mobile workstation; three spindles Intel® Core™ i7 processor i7-720QM or i7-820QM with quad-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1333MHz), Intel Turbo Boost, Hyper-Threading technology; i7-720QM: 1.60GHz, 6MB cache; i7-820QM: 1.73GHz, 8MB cache	Preloaded operating system <sup>20</sup> - Genuine Windows® 7 Professional 64 Preloaded applications¹⁴ (only some listed)
Memory	<b>2GB</b> or <b>4GB</b> std / 16GB max <sup>7</sup> / PC3-8500 1066MHz <b>DDR3</b> , non-parity, dual-channel capable, four 204-pin SO-DIMM sockets	<ul> <li>Rescue and Recovery™</li> <li>Access Connections™</li> </ul>
SATA DVD±RW Ultrabay Enhancd SATA disk(s)	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high One disk, <b>320GB</b> <sup>8</sup> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 3rd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	<ul> <li>Password Manager</li> <li>ThinkVantage Power Manager</li> <li>Fingerprint Software</li> <li>ThinkVantage Toolbox</li> <li>Microsoft Office 2010 preloaded;</li> </ul>
Widescreen display	Some: 17.0" (433.0mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio, 45% color gamut Some: 17.0" (433.0mm) WUXGA (1920x1200) color, anti-glare, RGB LED backlight,	purchase product key to activate     Corel® WinDVD® (DVD±RW)    CV activate actifications   CV activate activate actifications   CV activate
0 1 111 11	280 nits, 16:10 aspect ratio, 600:1 contrast ratio, 100% color gamut	ISV software certifications
Color calibration Camera	Some: huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 2.0-megapixel, fixed focus	Supports ThinkVantage® technologies
Discrete	NVIDIA® Quadro® FX2800M, PCI Express® x16, 1GB memory	ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable
graphics	supports dual independent display;  Maximum external resolution:	mgmt for W700 and W701 Series
	2560x1600 (DisplayPort or dual-link DVI-D) @ 60Hz; 2048x1536 (VGA) @ 85Hz	Features:
Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard Some: Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions	Security key lock Security cable lock slot External monitor ports Analog VGA DB-15 Dual-link DVI-D DisplayPort Four USB 2.0 ports
Dimensions <sup>3</sup> Weight <sup>2</sup> Case material  Battery - type Battery - life <sup>10</sup>	9-cell 17W" (WxDxH): 16.1" x 12.2" x 1.60-1.63"; 410mm x 310mm x 40.6-41.4mm 9-cell: starting at 8.97 lb (4.07kg) Top: magnesium alloy; Bottom: Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 9-cell 9-cell: up to 2.0 hr	<ul> <li>eSATA port</li> <li>Gigabit ethernet port</li> <li>Microphone in and headphone out</li> <li>S/PDIF (RCA coaxial digital out)</li> <li>Requires 170 or 230 watt AC adptr</li> </ul>
Chipset ExpressCard/34 ExpressCard/54 Compact Flash Smart Card Read	Mobile Intel QM57 Express Chipset One ExpressCard/34 Some: [/54] One ExpressCard/34 or ExpressCard/54 None Some: Smart Card Reader 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One USB 3.0, Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor <sup>11</sup> (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	230-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup> via 800-426-7378
	One PCI Express Half Mini Card slot 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3 56K V.92® modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	ThinkPlus <sup>TM, 22</sup> 3-year LOR <sup>24</sup> 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
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Lenovo® ThinkPad W701ds

Lenovo ThinkPad W701ds



Lenovo ThinkPad W701ds



ThinkPad 17W Business Topload Case 43R9117



ThinkPad 230W AC Adapter 55Y9333

Type-model Processor Memory (MHz)	Primary display	Secondary display Came	Discrete a graphics	Disk(s) SATA GB <sup>®</sup> rpm	Color Pow calib/ Adap RAIDDigitizer (wa	ter Intel	Avail date
2500-2XU i7-820QM 4GBx2 1333 1	7" WUXGA	10.6" WXGA	FX3800M	128G SSD + 320G 5400	None Yes 230	V vPro Pro 64	Mar 10
2500-3CU i7-820QM 2GBx2 1066 1	7" WUXGA	10.6" WXGA 2.0N	1 FX3800M	500G 7200	None Yes 230	V vPro Pro 64	Mar 10

- ds = dual screen
- 13" widescreen ThinkPad workstation with two RAID-capable disks
   Select models include integrated color calibration and digitizer on palm rest
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

non-partly, dual-channel capable, four 204-pin SO-DIMM sockets  SATA DVD±RW  Ultrabay Enhancd  One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high  Some: One disk, 500GB° (7200 rpm) / SATA 3.0Gb/s, 2.5° wide, 9.5mm high,  Active Protection System™ (APS)  Some: Two disks, 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8° wide, 8mm high  and 320GB (5400 rpm) / SATA 3.0Gb/s, 2.5° wide, 9.5mm high, APS  All: removable, upgradable, supports three disks max, Shock Mounted Hard Drive  Displays  Primary: 17.0° (433.0mm) WUXGA (1920x1200) color, anti-glare,  RGB LED backlight, 230 nits, 16:10 aspect ratio, 600:1 contrast ratio,  100% color gamut;  Secondary: 10.6° (268.7mm) WXGA (768x1280) color, portrait, anti-glare, LED  backlight, 230 nits, 9:15 aspect ratio, 190:1 contrast ratio, 45% color gamut,  Sildes out of right side of top cover, 30° tilt, 40% of primary screen size  huey™PPRO Colorimeter by X-Rite® color calibration sensor in palm rest  Some: camera on top of screen, 2.0-megapixel, fixed focus  Discrete  graphics  WiDIA® Quadro® FX3800M, PCI Express® x16, 1GB memory,  supports dual independent display;  Maximum external resolution:  2560x1600 (DisplayPort or dual-link DVI-D) @60Hz; 2048x1536 (VGA) @85Hz  Keyboard  TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass  UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label  10-key numeric keypad on right side of keyboard  Digitizer  TwinkLight™  Dimensions³  9-cell 17W" (WxDxH): 16.1* x12.2* x 2.1*; 410mm x 310mm x 52.2mm  9-cell: up to 2.0 hr  Chipset  Mobile Intel QM57 Express Chipset  One ExpressCard/34  None  CF] One Type I slot  None  CF] One Type I slot  One DSB 3.0, Three USB 2.0 (one powered), one USB 2.0(SATA combo port, external monitor¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (CJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)  One PCIE Mini Card  Intel 6300°8  11a/b/g/m wireless, PCIe Half Mini Card, Intel Centrino® Ultimate-N 6	listed)  ■ Rescue and Recovery™  ■ Aggrega Compostions™
RGB LED backlight, 280 nits, 16:10 aspect ratio, 60:1 contrast ratio, 100% color gamut; Secondary: 10.6" (268.7mm) WXGA (768x1280) color, portrait, anti-glare, LED backlight, 230 nits, 9:15 aspect ratio, 190:1 contrast ratio, 45% color gamut, slides out of right side of top cover, 30° tilt, 40% of primary screen size huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Some: camera on top of screen, 2.0-megapixel, fixed focus  NVIDIA® Quadro® FX3800M, PCI Express® x16, 1GB memory, supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort or dual-link DVI-D) @ 60Hz; 2048x1536 (VGA) @ 85Hz  Keyboard TrackPoint® TrackPoint® TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions  Dimensions³ 9-cell 17W" (WxDxH): 16.1" x 12.2" x 2.1"; 410mm x 310mm x 52.2mm 9-cell: starting at 11.43 lb (5.23kg)  Top: magnesium alloy; Bottom: Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium lon 9-cell 9-cell: up to 2.0 hr  Chipset Compact Flash Smart Card read Multicard reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One USB 3.0, Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)  PCIe Mini Card Intel 6300²8  Intel Card Intel 6300²8  Port Rate Provided	<ul> <li>Access Connections™</li> <li>Password Manager</li> <li>ThinkVantage Power Manager</li> <li>ThinkVantage System Update</li> <li>Fingerprint Software</li> <li>ThinkVantage Toolbox</li> <li>Microsoft Office 2010 preloaded;</li> </ul>
Sildes out of right side of top cover, 30° tilt, 40% of primary screen size huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest some: camera on top of screen, 2.0-megapixel, fixed focus  NVIDIA® Quadro® FX3800M, PCI Express® x16, 1GB memory, supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort or dual-link DVI-D)@60Hz; 2048x1536 (VGA)@85Hz  Keyboard TrackPoint® TrackPoint® TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Numeric keypad Digitizer ThinkLight™ Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions  Dimensions³ 9-cell 17W" (WxDxH): 16.1" x 12.2" x 2.1"; 410mm x 310mm x 52.2mm 9-cell: starting at 11.43 lb (5.23kg)  Top: magnesium alloy; Bottom: Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 9-cell y-cell: up to 2.0 hr  Mobile Intel QM57 Express Chipset  One ExpressCard/34 None  [CF] One Type I slot None  Some: camera on top of screen, 2.0-megapixel, fixed focus in palm rest defocus in palm rest and reader	purchase product key to activate • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW)
Color calibration Camera  Discrete graphics  NVIDIA® Quadro® FX3800M, PCI Express® x16, 1GB memory, supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort or dual-link DVI-D)@60Hz; 2048x1536 (VGA)@85Hz  Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™  Dimensions³ Weight² Case material Battery - type Battery - life® Battery - li	ISV software certifications
Discrete graphics    NVIDIA® Quadro® FX3800M, PCI Express® x16, 1GB memory, supports dual independent display;   Maximum external resolution:   2560x1600 (DisplayPort or dual-link DVI-D)@60Hz; 2048x1536 (VGA)@85Hz   Keyboard     TrackPoint®     TrackPoint®     TrackPoint®     TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass     UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label     UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label     To-key numeric keypad on right side of keyboard     Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side     Two LEDs illuminate the keyboard to improve visibility in low-light conditions     Dimensions³     9-cell 17W" (WxDxH): 16.1" x 12.2" x 2.1"; 410mm x 310mm x 52.2mm     9-cell: starting at 11.43 lb (5.23kg)     Top: magnesium alloy;     Bottom: Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic     Lithium Ion 9-cell     9-cell: up to 2.0 hr     Mobile Intel QM57 Express Chipset     One ExpressCard/34     None     CF  One Type I slot     None     CF  One Type I slot     One USB 3.0, Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)     PCIe Mini Card Intel 6300 <sup>28</sup>     One PCI Express Half Mini Card slot     Intel 6300 <sup>28</sup>	Supports ThinkVantage® technologies
graphics  supports dual independent display;  Maximum external resolution:  2560x1600 (DisplayPort or dual-link DVI-D)@60Hz; 2048x1536 (VGA)@85Hz  Keyboard  Reyboard  Sey-key, ThinkVantage button, spill-resistant, multimedia Fn keys  TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass  UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label  10-key numeric keypad on right side of keyboard  UltraNav™, wide touch pad below keyboard  10-key numeric keypad on right side of keyboard  UltraNav™, wide touch pad below keyboard  10-key numeric keypad on right side of keyboard  UltraNav™, wide touch pad below keyboard  10-key numeric keypad on right side of keyboard	ThinkPad W700 Mini Dock 2.0
Keyboard TrackPoint® TrackPoint® Digitizer ThinkLight™  Dimensions³ Weight² Case material Battery - type Battery - life¹¹0 Battery - life¹¹0 Compact Flash Smart Card Fash Smart Card reader Ports  Mobile Intel QM57 Express Chipset Compact Flash Smart Card reader Ports  Mobile Intel GAD28  Multicard reader Ports  Pol Cle Mini Card Intel 6300²8  Meyada Numeric keyboard  Numeric keypad Digitizer TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions  9-cell 17W" (WxDxH): 16.1" x 12.2" x 2.1"; 410mm x 310mm x 52.2mm 9-cell: starting at 11.43 lb (5.23kg) Top: magnesium alloy; Bottom: Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium lon 9-cell 9-cell: up to 2.0 hr  Mobile Intel QM57 Express Chipset One ExpressCard/34 None [CF] One Type I slot None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One USB 3.0, Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor¹¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)  PCIe Mini Card Intel 6300²8  Intel 6300²8  None  One PCI Express Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3	Provides desktop expansion and cable mgmt for W700 and W701 Series Features:
Dimensions³  Weight²  Case material  Battery - type Battery - life¹¹  Chipset  ExpressCard/54  Compact Flash  Smart Card read  Multicard reader  Ports  Mobile Intel GMC, Memory Stick, Mem Stick Pro, SD, SDHC)  One USB 3.0, Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)  PCIe Mini Card Intel 6300²8  Poeell: starting at 11.43 lb (5.23kg)  Pceell: x 12.2" x 2.1"; 410mm x 310mm x 52.2mm  9-cell: y 20.1"; 410mm x 310mm x 310mm x 52.2mm  9-cell: y 20.1"; 410mm x 310mm x 310mm x 310mm x 310mm  Pcle Mini Card y 20.1"; 410mm x 310mm x 310mm x 310mm  9-cell: y 20.1"; 410mm x 310mm x 310mm  Pcle Mini Card y 20.1"; 410mm x 310mm x 310mm  9-cell: y 20.1"; 410mm x 310mm  9-cell: y 20.1"; 410mm  9-cell: y 20.1	<ul> <li>Security key lock</li> <li>Security cable lock slot</li> <li>External monitor ports <ul> <li>Analog VGA DB-15</li> <li>Dual-link DVI-D</li> <li>DisplayPort</li> </ul> </li> <li>Four USB 2.0 ports</li> </ul>
Chipset ExpressCard/34 One Express Chipset One ExpressCard/34 None (CF) One Type I slot None Multicard reader Ports One USB 3.0, Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor <sup>11</sup> (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)  PCIe Mini Card Intel 6300 <sup>28</sup> One PCI Express Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3	eSATA port     Gigabit ethernet port     Microphone in and headphone out     S/PDIF (RCA coaxial digital out)     Requires 170 or 230 watt AC adptr
Intel 6300 <sup>28</sup> 11a/b/g/n wi <sup>r</sup> eless, PCIe Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3	230-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR™ 5.0-compliant RoHS-compliant International Warranty Service¹7 24 hour x 7 day¹8 toll-free support during the warranty period¹² via 800-426-7378
Modem Bluetooth™ Bluetooth 2.1 wireless, LED indicator Ethernet Intel AMT Intel AMT Audio support High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Security Security chip Fingerprint reader Fingerprint reader UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip Limited warranty¹² 3-year - depot repair service / service upgrades²² available	ThinkPlus <sup>TM. 22</sup> 3-year LOR 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

#### ThinkPad® W701, W701ds Accessories

Memory	
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706 ann 06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25Pack)	57Y4385 ann 06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707 ann 06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25Pack)	57Y4386 ann 06/23/09
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708 ann 06/23/09
1GB PC3-10600 DDR3 L-H SODIMM	55Y3709 ann 03/02/10
1GB PC3-10600 DDR3 L-H SODIMM (25Pack)	57Y4415 ann 03/02/10
2GB PC3-10600 DDR3 L-H SODIMM `	55Y3710 ann 03/02/10
2GB PC3-10600 DDR3 L-H SODIMM (25Pack)	57Y4416 ann 03/02/10
4GB PC3-10600 DDR3 L-H SODIMM `	55Y3711 ann 03/02/10

Ultrabay Slim 9.5mm
Serial ATA Hard Drive Bay Adapter III<sup>48</sup>
43N3412 ann 06/23
48 Slim 9.5mm device in 12.7mm bay shows gap above the device. 43N3412 ann 06/23/09

**Ultrabay Enhanced 12.7mm** 

Blu-ray Reader / DVD Burner Ultrabay Enh 43N3295 ann 01/07/10

Storage and removable storage

160GB Disk SATA 3.0Gb/s (7200 rpm) <sup>41</sup>	41N5737 ann 10/16/07
250GB Disk SATA 3.0Gb/s (5400 rpm) <sup>41</sup>	43R8152 ann 01/15/08
250GB Disk FDE SATA 3.0Gb/s (7200 rpm)41	43N3410 ann 01/20/09
320GB Disk SATA 3.0Gb/s (5400 rpm)41 /	43N3403 ann 08/05/08
320GB Disk SATA 3.0Gb/s (7200 rpm) <sup>41</sup>	43N3411 ann 01/20/09
500GB Disk SATA 3.0Gb/s (7200 rpm) <sup>41</sup>	43N3423 ann 01/07/10
41 Can be used as the main HDD or '	

with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay 128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover) 256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover) ThinkPad 160GB Intel X25-M SSD<sup>41</sup> 43N3406 ann 08/26/08 43N3417 ann 06/23/09

43N3435 ann 06/22/10 USB 2.0 Portable 320GB Hard Disk 45K1689 ann 03/17/09 USB 2.0 Portable 500GB Hard Disk 45K1690 ann 05/26/09 USB 2.0 Portable Secure 160GB Hard Disk 43R2018 ann 11/18/08 USB 2.0 Portable Secure 320GB Hard Disk 43R2019 ann 11/18/08 eSATA/USB 2.0 Secure 500GB Hard Drive 57Y4400 ann 01/07/10 USB 2.0 Portable DVD Burner 43N3264 ann 01/05/10

ThinkPad Expansion

Lenovo® Essential Notebook Stand 45J9292 ann 05/12/09 45K1610 ann 07/28/09 USB Port Replicator with Digital Video ThinkPad W700 Mini Dock 2.0 57Y4345 ann 09/29/09

More information at www.lenovo.com/support/W700minidock

Keyboard

TrackPoint Cap Collection 73P2698 ann 12/16/03 USB Numeric Keypad 33L3225 ann 05/01/00 Preferred Pro USB Keyboard 73P5220 ann 06/21/05 Enhanced Performance USB Keyboard 73P2620 ann 03/23/04 Ultraslim Wireless Keyboard and Mouse52 57Y4700 ann 09/15/09 52 Wireless via 2.4GHz technology using a micro-size USB receiver. ThinkPad USB Keyboard with TrackPoint 55Y9003 ann 08/18/09 Lenovo® USB Fingerprint Keyboard 73P4730 ann 02/22/05 Lenovo USB Smartcard Keyboard 51J0155 ann 03/24/09

Mouse

Lenovo Optical Mouse (USB) 06P4069 ann 05/21/03 Lenovo Laser Mouse (USB) 41U3074 ann 01/23/07 ThinkPad USB Laser Mouse 57Y4635 ann 12/15/09 Lenovo ScrollPoint® Mouse (USB, Optical)
ThinkPad Travel Mouse (USB, Optical) 31P7405 ann 08/27/02 31P7410 ann 06/04/02 ThinkPad Bluetooth Laser Mouse 41U5008 ann 01/22/08 Security

Kensington® MicroSaver® Cable Lock 73P2582 ann 12/29/03 Kensington Twin Head Cable Lock 45K1620 ann 09/30/08 Lenovo Security Cable Lock 57Y4303 ann 08/24/10 USB Gemplus GemPC Smart Card Reader 41N3040 ann 02/21/06 ExpressCard Gemplus Smart Card Reader<sup>57</sup> 41N3043 ann 06/27/06 <sup>57</sup>Only compatible with the models having 54mm Express card slot.

ThinkPad In-Ear Headphones 57Y4488 ann 01/07/10

**Batteries** 

ThinkPad Battery 37++ (9-cell) 45J7914 ann 08/12/08 ThinkPad 230W AC Adapter 55Y9333 ann 02/23/10

More information at www.lenovo.com/alldaycomputing

**Carrying Cases** 

Up to 17.0" widescreen models:

ThinkPad 17W Business Topload Case 43R9117 ann 08/12/08

More information at www.lenovo.com/support/cases

**Monitors** 

Lenovo L2230x Wide 21.5" Monitor ThinkVision® L1711p 17" Monitor 5453HB1 ann 06/10/10 5047HB2 ann 10/20/09 ThinkVision L1900p 19" Monitor 4431HE1 ann 11/11/08 ThinkVision L1951p Wide 19" Monitor ThinkVision L2250p Wide 22" Monitor ThinkVision L2251p Wide 22" Monitor ThinkVision L2251x Wide 22" Monitor ThinkVision L2251x Wide 22" Monitor ThinkVision L2321x Wide 23" Monitor 2448HB6 ann 10/20/09 2572HB6 ann 10/20/09 2572HD6 ann 10/20/09 2578HB6 ann 10/20/09 4014HB6 ann 06/10/10 ThinkVision L2440p Wide 24" Monitor 4420HB2 ann 09/17/08

Monitor Accessories<sup>46</sup>

Lenovo USB-to-DVI Monitor Adapter 45K5296 ann 05/12/09 Lenovo DisplayPort to VGA Monitor Cable 57Y4393 ann 08/04/09 DisplayPort to Single-link DVI-D Cable ThinkVision USB Soundbar 45J7915 ann 08/05/08 40Y7616 ann 08/23/05 ThinkVision Soundbar 45K1263 ann 09/16/08 Kensington MicroSaver Cable Lock 73P2582 ann 12/29/03 Kensington Twin Head Cable Lock 45K1620 ann 09/30/08 57Y4303 ann 08/24/10 Lenovo Security Cable Lock Lenovo Easy Reach Monitor Stand 55Y9258 ann 09/22/09 46 Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit: www.lenovo.com/support/accessories www.lenovo.com/support/notebookaccessories www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories Accessories Guide pdf at www.lenovo.com/accessoriesguide





Lenovo® ThinkPad X100e



Lenovo ThinkPad X100e



Lenovo ThinkPad X100e



Lenovo ThinkPad X100e with 3-cell battery





Lenovo ThinkPad X100e

Lenovo ThinkPad X100e family

## ThinkPad® X100e (3508) - TopSeller (Windows 7)

Type-model	Proc- essor	GHz	Memory	screen	CCFL or LED		Integrated graphics	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	PCle Mini Card WWAN	Carrier		Blue- tooth	Preload	Avail date
3508-28U	MV-40	1.60	1GB	11.6" HD	LED	0.3M	HD 3200	160GB 5400	11b/g/n	WWAN upg		black		Home P 32	Jan 10
3508-29U	MV-40	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	11b/g/n	WWAN upg		black		Pro 32	Jan 10
3508-2AU	MV-40	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	11b/g/n	Gobi 2000	AT&T <sup>23</sup>	black		Pro 32	Jan 10
3508-9BU	L335	1.60	1GB	11.6" HD	LED	0.3M	HD 3200	160GB 5400	11b/g/n	WWAN upg		black		Home P 32	Mar 10
3508-9CU	L335	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	11b/g/n	WWAN upg		black		Pro 32	Mar 10
3508-9DU	L335	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	11b/g/n	WWAN upg		red		Pro 32	Mar 10
3508-9EU	L335	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	11b/g/n	Gobi 2000		black	Blue	Pro 32	Mar 10
3508-9TU	L335	1.60	1GB	11.6" HD	LED	0.3M	HD 3200	160GB 5400	11b/g/n	Gobi 2000	AT&T	black		Home P 32	Apr 10
3508-A9U	MV-40	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	11b/g/n	WWAN upg		black	Blue	Home P 32	Jul 10
3508-AAU	L335	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	11b/g/n	Gobi 2000	selectable	black		Pro 32	Jul 10
3508-AHU	L335	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	160GB 5400	11a/b/g/n	WWAN upg		black	Blue	Home P 32	Jul 10
3508-AKU	L335	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	11b/g/n	WWAN upg		black		Home P 32	Sep 10
3508-ALU	MV-40	1.60	1GB	11.6" HD	LED	0.3M	HD 3200	160GB 5400	11b/g/n	Gobi 2000	selectable	black	Blue	Home P 32	Sep 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Entry ultraportable for excellent usability and reliability; one spindle  AMD® Athlon™ Neo Processor for Ultrathin Notebooks MV-40 with single-core, virtualization technology, integrated DDR2 memory controller, and 512KB L2 cache or  AMD Athlon Neo X2 Processor for Ultrathin Notebooks L335 with dual-core, virtualization technology, integrated DDR2 memory controller, and 512KB L2 cache	Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7 Home Premium 32 - Some: Genuine Windows 7 Professional 32
Memory	1GB or 2GB std / 4GB max <sup>7</sup> / PC2-5300 667MHz DDR2, non-parity, dual-channel capable, two 200-pin SO-DIMM sockets; Non-italics: standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed)  • Rescue and Recovery™
SATA DVD±RW SATA disk	None (use optional USB-based optical drive) <b>160GB</b> <sup>8</sup> (5400 rpm) or <b>250GB</b> (5400 rpm) /  SATA 3.0Gb/s, 9.5mm high, Active Protection System™, upgradable	Access Connections <sup>TM</sup> Password Manager     ThinkVantage System Update
Widescreen display Camera	11.6" (295mm) HD (1366x768) TFT color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio Camera on top of screen, 0.3-megapixel, fixed focus, low light sensitive	ThinkVantage Power Manager ThinkVantage Toolbox Adobe® Reader® Adobe Flash® Player
Integrated graphics	ATI™ Radeon™ HD 3200 graphics, in M780G, external analog monitor support via VGA DB-15 connector; Maximum external resolution: 2048x1536@60Hz	Windows Live™ Toolbar     Skype™ for Windows     Microsoft Office 2010 preloaded;
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 6-row, spill-resistant, multimedia Fn keys TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar <sup>13</sup> , magnifying glass Two-button touch pad, suppots multi-touch function None	<ul> <li>purchase product key to activate</li> <li>Microsoft Research AutoCollage Touch</li> </ul>
Dimensions <sup>3</sup> Weight <sup>2</sup> Case	6-cell: 11.1" x 8.2" x 0.6-1.2"; 282mm x 209mm x 16-30mm 6-cell: from 3.3 lb (1.5kg) Color: black or red; Material: PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic	
Battery - type Battery - life <sup>10</sup>	Lithium Ion 6-cell 6-cell: up to 5 hr	Supports ThinkVantage® technologies
Chipset	AMD M780G Chipset, SB710 south bridge	65-watt AC Adapter EPEAT™ Gold rating
Multicard reader ExpressCard/54 Ports	4-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital) None Three USB 2.0 (one powered), external monitor (VGA DB-15), ethernet (RJ-45)	ENERGY STAR® 5.Ŏ-compliant ROHS-compliant International Warranty Service <sup>17</sup>
PCIe Mini Card 11b/g/n 11a/b/g/n	Two PCI Express Mini Card slots Some: 11b/g/n wireless <sup>4</sup> , ThinkPad 11b/g/n, PCIe Half Mini Card, Realtek® chipset, 1x2 Some: 11a/b/g/n wireless, ThinkPad 11a/b/g/n, PCIe Half Mini Card,	24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup> via 800-426-7378
WWAN upg Gobi™ 2000	Broadcom® chipset, 2x2  Some: Wireless WAN upgradable  Some: Wireless WAN, Qualcomm chipset, PCle Mini Card, EV-DO Rev. A,  GPRS/WCDMA/HSPA, GPS	ThinkPlus <sup>TM. 22</sup> 1-year LOR <sup>24</sup> 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD
Carrier	Some: AT&T®, contract required with service provider Some: User selectable at first boot, AT&T, Verizon®, or Sprint®,	45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970
Modem Bluetooth™	contract required with service provider  None  Some: Bluetooth 2.1 wireless	ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 2-year P&L P/U Depot
Ethernet Intel AMT Audio support	Realtek RT8111DL Gigabit Network Connection, PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20582-11Z codec /	45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972
Security Security chip	stereo speakers, 1.5 watt x 2 / combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole None	ThinkPlus 4-year P&L P/U Depot 45K5974 Post-warranty annual maintenance
Fingerprint reader		agreements at
Limited warranty <sup>12</sup>	1-year - depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty

### ThinkPad® X100e Accessories

IIKPau ATOUE Accessories		7 0.00.14.1	your more recording (r or initial)
Memory 1GB PC2-5300 DDR2 SODIMM 1GB PC2-5300 DDR2 SODIMM (25-Pack) 2GB PC2-5300 DDR2 SODIMM 2GB PC2-5300 DDR2 SODIMM (25-Pack)	40Y7734 ann 01/05/06 51J0502 ann 03/17/09 40Y7735 ann 11/28/06 51J0548 ann 03/17/09	Batteries ThinkPad Battery 17+ (6-cell) ThinkPad External Battery Charger <sup>44</sup> 44 Requires the <i>ThinkPad 90W AC Adapte</i> 40Y7659 or the adapter provided with the	
Storage and removable storage		More information at www.lenovo.com/allda	aycomputing
USB 2.0 Portable 320GB Hard Disk USB 2.0 Portable 500GB Hard Disk USB 2.0 Portable Secure 160GB Hard Disk USB 2.0 Portable Secure 320GB Hard Disk	45K1689 ann 03/17/09 45K1690 ann 05/26/09 43R2018 ann 11/18/08 43R2019 ann 11/18/08	ThinkPad 65W AC Adapter ThinkPad 90W AC Adapter Lenovo Power Hub 90W Ultraslim AC/DC Combo Adapter	40Y7696 40Y7659 ann 09/20/05 57Y4600 ann 09/07/10 41R4493 ann 09/22/09
eSATA/USB 2.0 Secure 500GB Hard Drive <sup>53</sup> USB 2.0 Portable DVD Burner	57Y4400 ann 01/07/10 43N3264 ann 01/05/10	More info at www.lenovo.com/support/po	weradapters
53 USB-only attach.  Wireless WAN (Mini PCI Express)	45N0204 ann 61/65/16	Charging tips for 90W Ultraslim AC/DC Con •iPod and iPhone Charge Tip (L10a) •Generic Micro USB charge tip (L18)	nbo Adapter 41R4493 41R4481 ann 12/18/07 41R4490 ann 01/06/09
Only WWAN upgradable models:		More information at www.lenovopowertips	
ThinkPad AT&T® Gobi 2000 Broadband Opt ThinkPad Gobi 2000 Broadband Option	78Y1398 ann 01/07/10 78Y1399 ann 01/07/10		
ThinkPad Expansion Lenovo® Essential Notebook Stand	45J9292 ann 05/12/09	Carrying Cases ThinkPad 11W Case Sleeve ThinkPad 11W Sling Case	57Y4286 ann 01/05/10 57Y4287 ann 01/05/10
56 USB Port Replicator with Digital Video 45	5K1610 is not supported	More information at www.lenovo.com/supp	port/cases
keyboard TrackPoint Cap Collection USB Numeric Keypad Preferred Pro USB Keyboard Enhanced Performance USB Keyboard Ultraslim Wireless Keyboard and Mouse <sup>52</sup> Source Wireless via 2.4GHz technology using a manake ThinkPad USB Keyboard with TrackPoint Preferred Pro USB Fingerprint Keyboard Lenovo USB Smartcard Keyboard Mouse Lenovo Optical Mouse (USB) Lenovo Laser Mouse (USB) ThinkPad USB Laser Mouse Lenovo ScrollPoint® Mouse (USB, Optical) ThinkPad Travel Mouse (USB, Optical) ThinkPad Bluetooth Laser Mouse Lenovo Wireless Laser Mouse - Black <sup>52</sup> Lenovo Wireless Laser Mouse - Red/Black <sup>52</sup>	73P2698 ann 12/16/03 33L3225 ann 05/01/00 73P5220 ann 06/21/05 73P2620 ann 03/23/04 57Y4700 ann 09/15/09	Lenovo Security Cable Lock Lenovo Easy Reach Monitor Stand <sup>46</sup> Compatible on selected Lenovo and Thir	
Kensington® MicroSaver® Cable Lock Kensington® MicroSaver® Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock USB Gemplus GemPC Smart Card Reader  Multimedia ThinkPad In-Ear Headphones	73P2582 ann 12/29/03 45K1620 ann 09/30/08 57Y4303 ann 08/24/10 41N3040 ann 02/21/06 57Y4488 ann 01/07/10	For more information on accessories, pleas www.lenovo.com/support/accessories www.lenovo.com/support/notebookaccewww.lenovo.com/support/security	ssories
Modem USB 2.0 Lenovo Modem	43R1814 ann 02/26/08	Other accessories at www.lenovo.com/acc Accessories Guide pdf at www.lenovo.com/	

# ThinkPad<sub>®</sub>



Lenovo® ThinkPad X201 (TrackPoint model)



Lenovo ThinkPad X201 with ThinkPad Battery 47++ (9-cell) 43R9255



Lenovo ThinkPad X201 (UltraNav model)



Lenovo ThinkPad X201 (UltraNav model)



ThinkPad X200 UltraBase 43R8781



ThinkPad 65W AC Adapter 40Y7696

Type-model	Proc- essor	Base (GHz)		Memo		Wide- screen display	Camera	SA	sk TA rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCle Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Intel vPro Preload	Avail d date
3249-2EU	i5-540M	2.53	3.06	2GB	12.	1" WXGA		250G	5400			Intel 6200 <sup>28</sup>	3 WWAN upa		vPro Pro 32	Mar 10
3249-2FU	i5-540M	2.53	3.06	2GB	12.	1" WXGA	2.0M	320G	7200	DVD±RW	UltraBase	Intel 6200	WWAN upg		vPro Pro 32	Mar 10
3249-2GU	i5-540M	2.53	3.06	4GB	12.	1" WXGA	2.0M	320G	7200	<b>DVD</b> ±RW	UltraBase	Intel 6200	Gobi 2000	Verizon16	vPro Pro 32	Mar 10
3249-2HU	i5-520M	2.40	2.93	4GB	12.	1" WXGA	2.0M	320G	7200	<b>DVD</b> ±RW	UltraBase	Intel 6200	WWAN upg		vPro Pro 32	Mar 10
3249-2TU	i5-540M	2.53	3.06	4GB	12.	1" WXGA	2.0M	320G	7200	<b>DVD</b> ±RW	UltraBase	WiMAX	WWAN upg		vPro Pro 64	Mar 10
3249-2UU	i5-540M	2.53	3.06	4GB	12.	1" WXGA	2.0M	320G	7200	<b>DVD</b> ±RW	UltraBase	Intel 6200	Gobi 2000	AT&T <sup>23</sup>	vPro Pro 64	Mar 10
3249-2VU	i5-540M	2.53	3.06	4GB	12.	1" WXGA	2.0M	320G	7200	<b>DVD</b> ±RW	UltraBase	Intel 6200	WWAN upg		vPro Pro 64	Mar 10
3249-C2U	i5-520M	2.40	2.93	2GB	12.	1" WXGA	2.0M	160G	7200			Intel 6200	WWAN upg		vPro Pro 64	Apr 10
3249-C3U	i5-520M	2.40	2.93	2GB	12.	1" WXGA	2.0M	320G	7200			Intel 6200	WWAN upg		vPro Pro 64	Apr 10
3249-EPU	i5-560M	2.66	3.20	2GB	12.	1" WXGA	2.0M	320G	7200	<b>DVD</b> ±RW	UltraBase	Intel 6200	WWAN upg		vPro Pro 64	Sep 10
3249-ERU	i5-560M	2.66	3.20	2GB	12.	1" WXGA		160G	7200			Intel 6200	WWAN upg		vPro Pro 64	Sep 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	An ultraportable for the executive on the move; one spindle  Intel® Core™ i5 processor i5-520M, i5-540M, or i5-560M with dual-core,  DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7			
Memory	<b>2GB</b> or <b>4GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available	Professional 64  Preloaded applications¹⁴ (only some listed)  • Rescue and Recovery™			
SATA DVD±RW Ultrabay Slim SATA disk	Some: DVD burner, SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781)  160GB <sup>8</sup> (7200 rpm), 250GB (5400 rpm), or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std X200 UltraBase	Access Connections™     Password Manager     ThinkVantage Power Manager     ThinkVantage System Update     Fingerprint Software (fingerprint			
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Some: camera on top of screen, 2.0-megapixel, fixed focus	models)     Microsoft Office 2010 preloaded; purchase product key to activate			
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase;	Supports ThinkVantage® technologies			
grapriics	supports dual independent display;	ThinkPad X200 UltraBase™			
Keyboard	Maximum external resolution: 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz	Provides desktop expansion and cable management for X200 and			
TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	<ul><li>X201 Series</li><li>Easily connects to the bottom of the X200 or X201 Series for traveling</li></ul>			
Dimensions <sup>3</sup> Weight <sup>2</sup> Case Battery - type Battery - life <sup>10</sup>	without UltraBase; 4/6-cell: 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm without UltraBase; 9-cell: 11.6" x 9.2" x 0.8-1.4"; 295mm x 233.8mm x 20.7-35.3mm 4-cell: from 2.89 lb (1.31kg); 6-cell: from 3.18 lb (1.44kg); 9-cell: from 3.52 lb (1.60kg) Color: black; Material: magnesium alloy Lithium lon 6-cell 4-cell: up to 3.4 hr; 6-cell: up to 6.7 hr; 9-cell: up to 11.3 hr	<ul> <li>Converts ThinkPad to a two-spind system with optional Ultrabay Slim accessories in right side:</li> <li>DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s</li> <li>Serial ATA Hard Drive Bay Adapter III</li> </ul>			
Chipset	Mobile Intel QM57 Express Chipset	Bay Adapter III 43N3412 Disks supported (some):			
Media slice Multicard reader ExpressCard/54 Ports	Some: ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0 (one powered), external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)	250GB FDE 7200 rpm 43N3410     320GB Disk 7200 rpm 43N3411  Other features:     Power button (front)     Stereo speakers (2 watt)			
PCIe Mini Card Intel 6200 <sup>28</sup> WiMAX	Two PCI Express Mini Card slots  Some: 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2  Some: 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX	Security key lock, security keyhole, and optional security screw     Analog DB-15 monitor port     DisplayPort (supports single-link			
WWAN upg Gobi™ 2000	Some: Wireless WAN upgradable Some: Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider	DVI-D via cable 45J7915)  • Four USB 2.0 ports  • Gigabit ethernet port			
Carrier Modem Bluetooth™ Ethernet	Some: AT&T® or Verizon®, contract required with service provider 56K V.92® modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1	<ul> <li>Microphone in and headphone out</li> <li>Second battery charger</li> <li>Requires 65 or 90 watt AC adapter</li> <li>1.6 lb; 730g</li> </ul>			
Intel AMT Audio support Security	Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speaker, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole	65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant			
Security chip Fingerprint reader	Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup>			
Limited warranty <sup>12</sup>	1-year - depot repair service / service upgrades <sup>22</sup> available	via 800-426-7378			

Proc- Type-model essor	Max Base turbo (GHz) (GHz)		Camera	Disk SATA GB <sup>®</sup> rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Intel vPro	Preload	Avail date
3249-1FU i5-480M	2.66 2.93	2GB 12.1" WX0	A 2.0M	160G 7200	Optional	Optional	Intel 1000	WWAN upa	No	Pro 64	Jan 11

- This small and medium business (SMB) model is part of the US TopSeller™ Program
   This system is Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	An ultraportable for the executive on the move; one spindle  Intel® Core™ i5 processor i5-480M with dual-core,  DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Genuine Windows <sup>®</sup> 7 Professional 64 Preloaded applications <sup>14</sup> (only some
Memory	2GB std / 8GB max <sup>7</sup> / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in 1 socket; 1 socket available	listed)  ■ Rescue and Recovery <sup>™</sup> ■ Access Connections <sup>™</sup>
SATA DVD±RW Ultrabay Slim SATA disk	Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781)  160GB® (7200 rpm) / SATA 2 Ch(c) 5 5 winds 0.5 mm high removable ungradeble Shock Mounted Hard	Password Manager     ThinkVantage Power Manager     ThinkVantage System Update
	SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std <i>X200 UltraBase</i>	Supports ThinkVantage® technologies
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	• Provides desktop expansion and cable management for X200 and
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; Maximum external resolution: 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz	<ul> <li>X201 Series</li> <li>Easily connects to the bottom of the X200 or X201 Series for traveling</li> <li>Converts ThinkPad to a two-spindle system with optional Ultrabay Slim</li> </ul>
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	accessories in right side:  - DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s 43N3292  - Serial ATA Hard Drive
Dimensions <sup>3</sup> Weight <sup>2</sup> Case Battery - type	without UltraBase; 4/6-cell: 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm without UltraBase; 9-cell: 11.6" x 9.2" x 0.8-1.4"; 295mm x 233.8mm x 20.7-35.3mm 4-cell: from 2.89 lb (1.31kg); 6-cell: from 3.18 lb (1.44kg); 9-cell: from 3.52 lb (1.60kg) Color: black; Material: magnesium alloy Lithium lon 6-cell	Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features:
Battery - life <sup>10</sup>	4-cell: up to 3.4 hr; 6-cell: up to 6.7 hr; 9-cell: up to 11.3 hr	<ul> <li>Power button (front)</li> </ul>
Chipset	Mobile Intel QM57 Express Chipset	Stereo speakers (2 watt)     Security key lock, security keyhole,
Media slice Multicard reader ExpressCard/54 Ports	Option: ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0 (one powered), external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)	<ul> <li>and optional security screw</li> <li>Analog DB-15 monitor port</li> <li>DisplayPort (supports single-link DVI-D via cable 45J7915)</li> <li>Four USB 2.0 ports</li> </ul>
PCIe Mini Card Intel 1000 WWAN upg Modem Bluetooth™	Two PCI Express Mini Card slots 11b/g/n wireless <sup>4</sup> , PCIe Mini Card, Intel Centrino® Wireless-N 1000, 1x2 Wireless WAN upgradable 56K V.92 <sup>6</sup> modem None	<ul> <li>Gigabit ethernet port</li> <li>Microphone in and headphone out</li> <li>Second battery charger</li> <li>Requires 65 or 90 watt AC adapter</li> <li>1.6 lb; 730g</li> </ul>
Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20585 codec / stereo speaker, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None	65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service¹7 24 hour x 7 day¹8 toll-free support during the warranty period¹2
Limited warranty <sup>12</sup>	1-year - depot repair service / service upgrades <sup>22</sup> available	via 800-426-7378

See footnotes for important warranty information US model announced January 11, 2011

Type-n	odel Processor	GHz	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCle Mini Card 802.11	PCIe Mini Card WWAN	Intel vPro	Preload	Avail date
<b>≈</b> 3249-	I2U i3-330M	2.13	2GB	12.1" WXGA	None	250G 5400	Optional	Optional	Intel 1000	WWAN upg	No	Pro 32	Mar 10
<b>&gt;&lt;</b> 3249-l	MCU i3-330M	2.13	2GB	12.1" WXGA	None	160G 7200	Optional	Optional	Intel 1000	WWAN upg	No	Pro 64	Apr 10
3249-	MDU i3-370M	2.40	2GB	12.1" WXGA	None	160G 7200	Optional	Optional	Intel 1000	WWAN upg	No	Pro 64	Jul 10
rs 3249-¹	IHU i3-390M	2.66	2GB	12.1" WXGA	None	160G 7200	Optional	Optional	Intel 1000	WWAN upg	No	Pro 64	Jan 11

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ i3 processor i3-330M, i3-370M, or i3-390M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7
Memory	<b>2GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available	Professional 64  Preloaded applications <sup>14</sup> (only some listed)
SATA DVD±RW Ultrabay Slim SATA disk	Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) <b>160GB</b> <sup>8</sup> (7200 rpm) or <b>250GB</b> (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std <i>X200 UltraBase</i>	<ul> <li>Rescue and Recovery™</li> <li>Access Connections™</li> <li>Password Manager</li> <li>Supports ThinkVantage® technologies</li> </ul>
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio	ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; Maximum external resolution: 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz	X201 Series  Easily connects to the bottom of the X200 or X201 Series for traveling  Converts ThinkPad to a two-spindle system with optional Ultrabay Slim
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	accessories in right side:  – DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s 43N3292  – Serial ATA Hard Drive
Dimensions <sup>3</sup> Weight <sup>2</sup> Case	without UltraBase; 4/6-cell: 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm without UltraBase; 9-cell: 11.6" x 9.2" x 0.8-1.4"; 295mm x 233.8mm x 20.7-35.3mm 4-cell: from 2.89 lb (1.31kg); 6-cell: from 3.18 lb (1.44kg); 9-cell: from 3.52 lb (1.60kg) Color: black; Material: magnesium alloy	Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411
Battery - type Battery - life <sup>10</sup>	Lithium Ion <b>6-cell</b> 4-cell: up to 3.4 hr; 6-cell: up to 6.7 hr; 9-cell: up to 11.3 hr	Other features: • Power button (front)
Chipset	Mobile Intel QM57 Express Chipset	Stereo speakers (2 watt)     Security key lock, security keyhole,
Media slice Multicard reader ExpressCard/54 Ports	Option: ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0 (one powered), external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)	<ul> <li>and optional security screw</li> <li>Analog DB-15 monitor port</li> <li>DisplayPort (supports single-link DVI-D via cable 45J7915)</li> <li>Four USB 2.0 ports</li> </ul>
PCIe Mini Card Intel 1000 WWAN upg Modem Bluetooth™	Two PCI Express Mini Card slots 11b/g/n wireless <sup>4</sup> , PCIe Mini Card, Intel Centrino® Wireless-N 1000, 1x2 Wireless WAN upgradable 56K V.92 <sup>6</sup> modem None	<ul> <li>Gigabit ethernet port</li> <li>Microphone in and headphone out</li> <li>Second battery charger</li> <li>Requires 65 or 90 watt AC adapter</li> <li>1.6 lb; 730g</li> </ul>
Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Intel 82577LC Gigabit Network Connection (Hanksville), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20585 codec / stereo speaker, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None	65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support
	1-year - depot repair service / service upgrades <sup>22</sup> available	during the warranty period <sup>12</sup> via 800-426-7378

See footnotes for important warranty information

□ US model announced January 11, 2011; previous models on February 23, April 20, or July 6, 2010

□ US models withdrawn effective July 31, 2010

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## ThinkPad® X201, X201s Accessories

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Memory 1GB PC3-8500 DDR3 Low-Halogen SODIMM 55Y3706 ann 06/23/01GB PC3-8500 DDR3 L-H SODIMM (25-Pack) 57Y4385 ann 06/23/01GB PC3-8500 DDR3 L-H SODIMM 55Y3707 ann 06/23/01GB PC3-8500 DDR3 L-H SODIMM 55Y370 DDR	09
2GB PC3-8500 DDR3 Low-Halogen SODIMM 55Y3707 ann 06/23/ 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) 57Y4386 ann 06/23/ 4GB PC3-8500 DDR3 Low-Halogen SODIMM 55Y3708 ann 06/23/	09 ThinkPad Battery 47 (4-cell) 43R9253 ann 08/05/08
Ultrabay Slim 9.5mm  Most Ultrabay Slim appearaging supported in ThinkBod Y200 UltraBa	ThinkPad External Battery Charger 40Y7625 ann 09/20/05
Most Ultrabay Slim accessories supported in ThinkPad X200 UltraBa Serial ATA Hard Drive Bay Adapter III 43N3412 ann 06/23/0	
DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s 43N3292 ann 08/03/ DVD Burner Ultrabay Slim Drive II SATA 1.5G/s43N3229 ann 06/23/0	10 ThinkPad 65W AC Adapter 40Y7696 ann 01/05/06
Ultrabay Slim Blu-ray Burner II (SATA) 43N3230 ann 06/23/	
Storage and removable storage 160GB Disk SATA 3.0Gb/s (7200 rpm) <sup>41</sup> 41N5737 ann 10/16/0	More info at www.lenovo.com/support/poweradapters
250GB Disk SATA 3.0Gb/s (5400 rpm) <sup>41</sup> 43R8152 ann 01/15/ 250GB Disk FDE SATA 3.0Gb/s (7200 rpm) <sup>41</sup> 43N3410 ann 01/20/ 320GB Disk SATA 3.0Gb/s (5400 rpm) <sup>41</sup> 43N3403 ann 08/05/	Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493  iPod and iPhone Charge Tip (L10a) 41R4481 ann 12/18/07 Generic Micro USB charge tip (L18) 41R4490 ann 01/06/09
320GB Disk SATA 3.0Gb/s (7200 rpm) <sup>41</sup> 43N3411 ann 01/20/0 500GB Disk SATA 3.0Gb/s (7200 rpm) <sup>41</sup> 43N3423 ann 01/07/	
<sup>41</sup> Can be used as the main HDD or with Serial ATA Hard Drive	Carrying Cases
Bay Adapter III 43N3412 in X200 UltraBase (43R8781)	Up to 12" widescreen models:
128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover) 43N3406 ann 08/26/0 256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover) 43N3417 ann 06/23/0	na l
ThinkPad 160GB Intel X25-M SSD <sup>41</sup> 43N3435 <i>ann</i> 06/22/USB 2.0 Portable 320GB Hard Disk 45K1689 <i>ann</i> 03/17/	10 Op to 13.3 widescreen models. ThinkPad Ultraportable Case 41U5062 ann 05/13/08
USB 2.0 Portable 500GB Hard Disk 45K1690 ann 05/26/0	09   Up to 15.4 widescreen models: Langua Massanger May 411,15253 and 05/01/07
USB 2.0 Portable Secure 160GB Hard Disk 43R2018 ann 11/18/0 USB 2.0 Portable Secure 320GB Hard Disk 43R2019 ann 11/18/0	Lenovo Performance BackPack 41U5254 ann 05/01/07
eSATA/USB 2.0 Secure 500GB Hard Drive <sup>53</sup> 57Y4400 ann 01/07/1	
<sup>53</sup> USB-only attach.	ThinkPad Deluxe Expander Case 43R2478 ann 05/13/08
Wireless WAN (Mini PCI Express)	ThinkPad Executive Leather Case 43R2480 ann 05/13/08
Only X201 WWAN upgradable models: ThinkPad Gobi™ 2000 Broadband Option 78Y1399 ann 01/07/	More information at www.lenovo.com/support/cases Lenovo luxury cases at www.lenovoluxurycases.com
ThinkPad AT&T® Gobi 2000 Broadband Option 78Y1398 ann 01/07/	10
ThinkPad Expansion	Monitors   Lenovo L2230x Wide 21.5" Monitor 5453HB1 ann 06/10/10
Lenovo® Essential Notebook Stand 45J9292 ann 05/12/0	09 ThinkVision® L1711p 17" Monitor 5047HB2 ann 10/20/09
USB Port Replicator with Digital Video 45K1610 ann 07/28/0 ThinkPad X200 UltraBase 43R8781 ann 08/05/0	
	ThinkVision L2250 Wide 22" Monitor 2572HB6 ann 10/20/09
<b>Keyboard</b> TrackPoint Cap Collection 73P2698 ann 12/16/0	ThinkVision L2251p Wide 22" Monitor   2572HD6   ann 10/20/09   ThinkVision L2251x Wide 22" Monitor   2578HB6   ann 10/20/09
USB Numeric Keypad 33L3225 ann 05/01/0	00 ThinkVision L2321x Wide 23" Monitor 4014HB6 ann 06/10/10
Preferred Pro USB Keyboard 73P5220 ann 06/21/0 Enhanced Performance USB Keyboard 73P2620 ann 03/23/0	
Ultraslim Wireless Keyboard and Mouse <sup>52</sup> 57Y4700 <i>ann</i> 09/15/0	
<ul> <li>Wireless via 2.4GHz technology using a micro-size USB receiver.</li> <li>ThinkPad USB Keyboard with TrackPoint</li> <li>55Y9003 ann 08/18/6</li> </ul>	Lenovo USB-to-DVI Monitor Adapter 45K5296 ann 05/12/09 Lenovo DisplayPort to VGA Monitor Cable <sup>50</sup> 57Y4393 ann 08/04/09
Lenovo® USB Fingerprint Keyboard 73P4730 ann 02/22/0	05 DisplayPort to Single-link DVI-D Cable 45J7915 ann 08/05/08
Lenovo USB Smartcard Keyboard 51J0155 ann 03/24/0	` '
Mouse Langua Optical Mouse (LISP) 06P4060, ann 05/21/	ThinkVision USB Soundbar
Lenovo Optical Mouse (USB) 06P4069 ann 05/21/0 Lenovo Laser Mouse (USB) 41U3074 ann 01/23/0	13P2562 ann 12/29/03
ThinkPad USB Laser Mouse 57Y4635 ann 12/15/0	99   Kensington Twin Head Cable Lock
Lenovo ScrollPoint® Mouse (USB, Optical) 31P7405 ann 08/27/0 ThinkPad Travel Mouse (USB, Optical) 31P7410 ann 06/04/0	Lenovo Easy Réach Monitor Stand 55Y9258 ann 09/22/09
ThinkPad Bluetooth Laser Mouse 41U5008 ann 01/22/0	28 Compatible on selected Lenovo and Thinkvision monitors.
Security	More information at www.lenovo.com/support/monitoraccessories
Kensington® MicroSaver® Cable Lock 73P2582 ann 12/29/0	
Kensington Twin Head Cable Lock 45K1620 ann 09/30/0 Lenovo Security Cable Lock 57Y4303 ann 08/24/	www.lenovo.com/support/accessories
X200s (WXGA+), X201s 12W Privacy Filter 43R2470 ann 08/05/0	www.lenovo.com/support/notebookaccessories
X200/X200s (WXGA), X201 12W Privacy Filter 55Y9264 ann 04/07/0 USB Gemplus GemPC Smart Card Reader 41N3040 ann 02/21/0	)9
ExpressCard Gemplus Smart Card Reader 41N3043 ann 06/27/0	





Lenovo® ThinkPad X201 Tablet



Lenovo ThinkPad X201 Tablet



Lenovo ThinkPad X201 Tablet



Lenovo ThinkPad X201 Tablet



Lenovo ThinkPad X201 Tablet with ThinkPad X200 Tablet Sleeve 43R9115



Lenovo ThinkPad X201 Tablet with ThinkPad X200 Tablet Sleeve 43R9115

	Max	Came	era Disk	Optical Thi	inkPad PCle	PCle	Bat-	
Proc- Type-model essor	Base turbo	Widescreen (Meg	a- SATA	in )	K200 Mini Car raBase 802.11	d Mini Card	tery Intel cells vPro Preload	Avai d date
2985-C3U i7-640L 2985-C4U i7-640L 2985-C5U i7-640L 2985-C6U i7-640L 2985-C7U i7-640L 2985-EWU i7-640L 2985-EXU i7-640L 2985-EYU i7-640L	LM 2.13 2.93 2GB 1 LM 2.13 2.93 4GB 1 • These small and me	2.1" WXGA Entry 2. 2.1" WXGA Entry 2. 2.1" WXGA Outdoor 2. 2.1" WXGA Multi 2. 2.1" WXGA Multi 2. 2.1" WXGA Entry 2. 2.1" WXGA Entry 2.	0 320G 7200 0 320G 7200 0 250G 5400 0 320G 7200 0 320G 7200 0 320G 7200 0 320G 7200 models are pa	DVD±RW   DVD±RW   DVD±RW   DVD±RW   DVD±RW   DVD±RW   DVD±RW	UltraB Intel 62 UltraB Intel 62 Intel 62 Intel 62 UltraB Intel 62 UltraB Intel 62 UltraB Intel 62 UltraB Intel 62 ItraB Intel 62	OO Gobi Verizor OO upg OO upg OO upg OO Gobi Verizor OO Gobi AT&T <sup>23</sup> OO upg		Mar 1 Mar 1 Mar 1 Mar 1 Mar 1 Mar 1 Mar 1
Positioning Processor	Intel® Core™ i7 proc DMI (Direct Media Int	raportable; one spindle essor i7-640LM with di erface), integrated DDF per-Threading technolog	R3 memory co		to 1066MHz),	- Some: Gei	perating system nuine Windows® 7 fessional 32 nuine Windows 7	7
Memory  SATA DVD±RW	2GB or 4GB std / 8G dual-channel capable ltalics: standard Non-italics: standard	B max <sup>7</sup> / PC3-8500 106 s, two 204-pin SO-DIMM d memory in both socked d memory in 1 socket; 1 SATA 1.5Gb/s, removab	6MHz <b>DDR3</b> , I sockets; ts; no sockets socket availa	non-parity, available; ble		Proloaded applisted)  Rescue and Access Co	ofessional 64  pplications¹⁴ (onlead Recovery™  nnections™	
Ultrabay Slim SATA disk	Supports Ultrabay Slir 250GB <sup>8</sup> (5400 rpm) of SATA 3.0Gb/s, 2.5" w	m devices in optional or s or <b>320GB</b> (7200 rpm) / ride, 9.5mm high, remov on System™, supports s	standard <i>X200</i> able, upgrada	O UltraBase able, Shock	Mounted Hard	<ul><li>ThinkVanta</li><li>Fingerprint</li></ul>	ige Power Manag ige System Upda Software	
Widescreen display	200 nits, 12.1" (30 400 nits,	98mm) <b>WXGA (1280x80</b> 16:10 aspect ratio, 500: 98mm) <b>WXGA (1280x80</b> 16:10 aspect ratio, 500: ctivity layers, PVA or IPS	1 contrast rat <b>00) TFT color</b> 1 contrast rat	io, PVĂ or II , anti-glare,	PS, frameless <b>LED backligh</b>	models) • Adobe® Re • Microsoft C	npleTap (Multi-To	ıded;
	MultiTouch: 12.1" (30 300 nits, enhance All: WideView (1' write on scre rotatable du picture frame	Namm) WXGA (1280x80) 16:10 aspect ratio, 500: d MultiTouch (touchscr 70° viewing), anti-reflect een with standard digit al swivel hinge for table mode (keyboard faces av	OO) TFT color 1 contrast rat een support p tive and anti-g tizer pen, per et mode (portr vay from user)	io, PVA or If pen & two-fir plare protect n holder in s rait or landso , buttons on o	PS, nger touch) ive coatings, ide base (right cape) or	<ul> <li>Corel® Win</li> <li>Corel Burn</li> <li>(DVD±RW)</li> <li>Corel DVD</li> </ul>	DVD® (DVD±RW) .Now™ Lenovo E	)
Camera	Some: camera on to	lide-lock, reset, rotation p of screen, 2.0-megap	ixel, fixed focu	IS		Supports Thir	nkVantage® techn	ologie
Integrated graphics  Keyboard	supports dual indepe Maximum external re	oort via analog VGA DB	P)@60Hz; 20	)48x1536(V		• Provides de cable mana X201 Serie	ad X200 UltraBasesktop expansion agement for X200 s nects to the bottor	and and
TrackPoint® Touchpad ThinkLight™	TrackPoint® pointing of UltraNav™, wide touc None	levice, "Press-to-Select hpad below keyboard, T	" Internet Scr Tap Zones, sc	oll Bar <sup>13</sup> , ma rolling regio	ns, multi-touch	X200 or X2 • Converts TI system with	01 Series for trav hinkPad to a two- n optional Ultraba s in right side:	eling spindle
Dimensions <sup>3</sup> Weight <sup>2</sup> Case Battery - type Battery - life <sup>10</sup>	without UltraBase; 8- 4-cell: from 3.57 lb (		1.3"; 295mm :	28mm x 26.9 x 257mm x 2	5-33.3mm 26.5-33.3mm	– DVD-RON SATA 1.50 – Serial ATA Bay Adap Disks sup	M Ultrabay Slim D G/s 43 A Hard Drive	3N3292 3N3412
Chipset	Mobile Intel QM57 E						Disk 7200 rpm 43	
Media slice Multicard Reader ExpressCard/54 Ports	5-in-1 reader (MMC, One slot (ExpressCal	200 UltraBase media sl Memory Stick, Mem Stic rd/34, ExpressCard/54) Dowered), external mon ernet (R.I-45)	ck Pro, SD, SI	DHC)			on (front)	eyhole,
PCIe Mini Card Intel 6200 <sup>28</sup> WWAN upg Gobi™ 2000	Two PCI Express Min 11a/b/g/n wireless, Pc Some: Wireless WAI Some: Wireless WAI	ii Card slots Cle Mini Card, Intel Cen	Cle Mini Car	d, EV-DO R	ev. A,	<ul> <li>Analog DB-</li> <li>DisplayPort DVI-D via c</li> <li>Four USB 2</li> <li>Gigabit ether</li> </ul>	-15 monitor port t (supports single- able 45J7915) 2.0 ports ernet port	
Carrier Modem Bluetooth™ Ethernet Intel AMT	Some: AT&T® or Ver 56K V.926 modem Bluetooth 2.1 wireles Intel 82577LM Gigab	izon®, contract required	with service p	orovider <sup>·</sup>		<ul><li>Second bat</li><li>Requires 6</li><li>1.6 lb; 730g</li></ul>	5 or 90 watt AC a	
Audio support Security Security chip	High Definition (HD) A volume up, down, mu Power-on password, Trusted Platform Moo UPEK Fingerprint rea	Audio, Conexant 20585 te buttons / dual array n hard disk password, sup lule, TCG 1.2-compliant ader (right base of displa	nic, mic input pervisor passv ay), used in ta	jack, headp word, securi blet/noteboo	hone jack ty keyhole ok mode,	ROHS-compl	d rating AR® 5.0-complian	17
Limited warranty <sup>12</sup>		_ED indicator, Power Or digitizer pen - depot re				during the	warranty period <sup>12</sup>	

Type-model		Base t			Widesci v displa	Camera (Mega- pixel)	SAT	Α	in	ThinkPad X200 UltraBase	Mini Card		Bat- tery cells		Avail date
2985-F2U	i7-620LM	1 2.00	2.80	2GB	12.1" WXG										
2985-F3U 2985-F4U											Intel 6200 Intel 6200				Apr 10 Apr 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Convertible tablet ultraportable; one spindle Intel® Core™ i7 processor i7-620LM with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 4MB cache	Preloaded operating system <sup>20</sup> - Genuine Windows® 7 Professional 64 Preloaded applications 14 (only some
Memory	2GB std / 8GB max <sup>7</sup> / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in 1 socket; 1 socket available	Preloaded applications¹⁴ (only some listed)   • Rescue and Recovery™   • Access Connections™
SATA DVD±RW Ultrabay Slim SATA disk	Some: DVD burner, SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781)  160GB <sup>8</sup> (7200 rpm) or 320GB (7200 rpm) /  SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std X200 UltraBase	Password Manager     ThinkVantage Power Manager     ThinkVantage System Update     Fingerprint Software (fingerprint models)     ThinkVantage Tealbay
Widescreen display	Entry:  12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, frameless  12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, PVA or IPS  MultiTouch: 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 300 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, enhanced MultiTouch (touchscreen support pen & two-finger touch)  MideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen, pen holder in side base (right), rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)	<ul> <li>ThinkVantage Toolbox</li> <li>Norton™ Internet Security 2011         (30 days of virus definitions)</li> <li>Adobe® Reader®</li> <li>Adobe Flash® Player</li> <li>Skype™ for Windows</li> <li>Windows Live™ Toolbar</li> <li>Microsoft Office 2010 preloaded; purchase product key to activate</li> <li>Microsoft Research AutoCollage Touch</li> </ul>
Camera	Camera on top of screen, 2.0-megapixel, fixed focus	Supports ThinkVantage® technologies
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; Maximum external resolution: 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz	ThinkPad X200 UltraBase™  • Provides desktop expansion and cable management for X200 and X201 Series
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch None	Easily connects to the bottom of the X200 or X201 Series for traveling     Converts ThinkPad to a two-spindle system with optional Ultrabay Slim
Dimensions <sup>3</sup> Weight <sup>2</sup> Case Battery - type Battery - life <sup>10</sup>	without UltraBase; 4-cell: 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33.3mm without UltraBase; 8-cell: 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33.3mm 4-cell: from 3.57 lb (1.62kg); 8-cell: from 3.96 lb (1.8kg)  Color: black; Material: magnesium alloy Lithium lon 8-cell  4-cell: up to 3.5 hr; 8-cell: up to 7.9 hr	accessories in right side:  - DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s 43N3292  - Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some):
Chipset	Mobile Intel QM57 Express Chipset	<ul><li>250GB FDE 7200 rpm 43N3410</li><li>320GB Disk 7200 rpm 43N3411</li></ul>
Media slice Multicard Reader ExpressCard/54 Ports	Some: ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0 (one powered), external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)	Other features:  Power button (front)  Stereo speakers (2 watt)  Security key lock, security keyhole, and optional security screw
PCIe Mini Card Intel 6200 <sup>28</sup> WWAN upg Gobi™ 2000	Two PCI Express Mini Card slots 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Some: Wireless WAN upgradable Some: Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider	Analog DB-15 monitor port     DisplayPort (supports single-link DVI-D via cable 45J7915)     Four USB 2.0 ports     Gigabit ethernet port
Carrier Modem Bluetooth™ Ethernet	Some: Verizon®, contract required with service provider 56K V.92 <sup>6</sup> modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1	Microphone in and headphone out     Second battery charger     Requires 65 or 90 watt AC adapter     1.6 lb; 730g
Intel AMT Audio support Security Security chip Fingerprint reader	Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader (right base of display), used in tablet/notebook mode,	65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service¹7 24 hour x 7 day¹8 toll-free support
	2-way swipe sensor, LED indicator, Power On Authentication, supports the security chip	during the warranty period <sup>12</sup>

	Type-model		Base t				Videscre display		Camer (Mega pixel)	- SA	sk TA rpm	Optical in UltraBase	X200	Mini Card	PCIe Mini Card WWAN	tery		Avail date
	2985-F7U	i5-520UM	1.06	1.86	4GB	12.1"	WXGA	Multi	2.0M	320G	7200	DVD±RV	/ UltraB	Intel 6200 <sup>28</sup>	WWAN upg	8	vPro Pro 32	Jun 10
	2985-FAU	i5-520UM	1.06	1.86	2GB	12.1"	WXGA	Entry		250G	5400	)		Intel 6200	WWAN upg	4	vPro Pro 64	Jun 10
*	2985-FBU	i5-520UM	1.06	1.86	2GB	12.1"	'WXGA	Outdoo	r 2.0M	320G	7200	)		Intel 6200	WWAN upg	8	vPro Pro 64	Jun 10
	2985-FCU	i5-520UM	1.06	1.86	2GB	12.1"	'WXGA	Multi	2.0M	250G	5400	)		Intel 6200	WWAN upg	8	vPro Pro 64	Jun 10
13	2985-FSU	i5-560M	2.66	3.20	2GB	12.1"	'WXGA	Entry		160G	7200	)		Intel 6200	WWAN upg	4	vPro Pro 64	Sep 10
<b>&gt;&lt;</b>	2985-FYU	i5-560M	2.66	3.20	2GB	12.1"	WXGA	Outdoo	r 2.0M	160G	7200	)		Intel 6200	WWAN upg	8	vPro Pro 64	Sep 10

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Positioning Processor	Convertible tablet ultraportable; one spindle Intel® Core™ i5 processor i5-520UM with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 800MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache or Intel Core i5 processor i5-560M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64 Preloaded applications <sup>14</sup> (only some listed)
Memory	<b>2GB</b> or <b>4GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available	Rescue and Recovery™     Access Connections™     Password Manager     ThinkVantage Power Manager
SATA DVD±RW Ultrabay Slim SATA disk	Some: DVD burner, SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781)  160GB <sup>8</sup> (7200 rpm), 250GB (5400 rpm), or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std X200 UltraBase	ThinkVantage System Update Fingerprint Software (fingerprint models) ThinkVantage Toolbox Lenovo SimpleTap (Multi-Touch
Widescreen display	Entry:  12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, frameless 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, PVA or IPS  MultiTouch: 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 300 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, enhanced MultiTouch (touchscreen support pen & two-finger touch)  All: WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen, pen holder in side base (right),	<ul> <li>models)</li> <li>Adobe® Reader®</li> <li>Adobe Flash® Player</li> <li>Skype™ for Windows</li> <li>Microsoft Office 2010 preloaded; purchase product key to activate</li> <li>Microsoft Research AutoCollage Touch</li> </ul>
	rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom	Supports ThinkVantage® technologies
Camera	(power with slide-lock, reset, rotation, menu, all button lock)  Some: camera on top of screen, 2.0-megapixel, fixed focus	ThinkPad X200 UltraBase™  • Provides desktop expansion and
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display;  Maximum external resolution: 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz	cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch None	system with optional Ultrabay Slim accessories in right side: – DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s 43N3292
Dimensions <sup>3</sup> Weight <sup>2</sup> Case Battery - type Battery - life <sup>10</sup>	without UltraBase; 4-cell: 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33.3mm without UltraBase; 8-cell: 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33.3mm 4-cell: from 3.57 lb (1.62kg); 8-cell: from 3.96 lb (1.8kg) Color: black; Material: magnesium alloy Lithium Ion 4-cell or 8-cell: to 2 cell: t	- Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features:
Chipset	4-cell: up to 3.5 hr; 8-cell: up to 7.9 hr  Mobile Intel QM57 Express Chipset	Power button (front)
Media slice Multicard Reader ExpressCard/54 Ports	Some: ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0 (one powered), external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)	Stereo speakers (2 watt)     Security key lock, security keyhole, and optional security screw     Analog DB-15 monitor port     DisplayPort (supports single-link DVI-D via cable 45J7915)
PCIe Mini Card Intel 6200 <sup>28</sup> WWAN upg Modem Bluetooth™ Ethernet	Two PCI Express Mini Card slots 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.926 modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1	Four USB 2.0 ports     Gigabit ethernet port     Microphone in and headphone out     Second battery charger     Requires 65 or 90 watt AC adapter     1.6 lb; 730g
Intel AMT Audio support Security Security chip Fingerprint reader	Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, 2-way swipe sensor, LED indicator, Power On Authentication, supports the security chip	65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service¹ 24 hour x 7 day¹8 toll-free support during the warranty period¹2
Limited warranty <sup>12</sup>	3-years/1-yr battery & digitizer pen - depot repair service / service upgrades <sup>22</sup> available	via 800-426-7378

### ThinkPad® X201 Tablet Accessories

Memory		Tablet	
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706 ann 06/23/09	ThinkPad Digitizer Pen	41U3143 ann 11/14/06
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)			41U4820 ann 11/14/06
2GB PC3-8500 DDR3 Low-Halogen SODIMM 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)			
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708 ann 06/23/09	ThinkPad Battery 12 (4-cell)	43R9256 ann 09/23/08
	00.0.00 a 00,20,00	ThinkPad Battery 12++ (8-cell)	43R9257 ann 09/23/08
Ultrabay Slim 9.5mm		ThinkPad External Battery Charger <sup>47</sup>	40Y7625 ann 09/20/05
Most Ultrabay Slim accessories supported in 1		e   4 Only supports ThinkPad Battery 12 (4-ce	II) 43R9256
Serial ATA Hard Drive Bay Adapter III	43N3412 ann 06/23/09		vcomputing
DVD-ROM Ultrabay Slim Drive II SATA 1.5G/s	43N3292 ann 08/03/10	<b>'</b>	
DVD Burner Ultrabay Slim Drive II SATA 1.5G/	s 43N3229 ann 06/23/08 43N3230 ann 06/23/08		40Y7696 ann 01/05/06 40Y7659 ann 09/20/05
Ultrabay Slim Blu-ray Burner II (SATA)	431N3230 aiii 00/23/08	Lenovo Power Hub	57Y4600 ann 09/07/10
Storage and removable storage		90W Ultraslim AC/DC Combo Adapter	41R4493 ann 09/22/09
160GB Disk SATA 3.0Gb/s (7200 rpm) <sup>41</sup>	41N5737 ann 10/16/02	,	
250GB Disk SATA 3.0Gb/s (5400 rpm) <sup>41</sup>	43R8152 ann 01/15/08	More info at www.lenovo.com/support/pov	•
250GB Disk FDE SATA 3.0Gb/s (7200 rpm) <sup>41</sup>	43N3410 ann 01/20/09		bo Adapter 41R4493
320GB Disk SATA 3.0Gb/s (5400 rpm) <sup>41</sup>	43N3403 ann 08/05/08		41R4481 ann 12/18/07
320GB Disk SATA 3.0Gb/s (7200 rpm) <sup>41</sup>	43N3411 ann 01/20/05		41R4490 <i>ann 01/06/09</i>
500GB Disk SATA 3.0Gb/s (7200 rpm) <sup>41</sup> 41 Can be used as the main HDD or with Seria	43N3423 ann 01/07/10	More information at www.lenovopowertips.	com
Bay Adapter III 43N3412 in X200 UltraBase (			
	,	Carrying Cases	
128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406 ann 08/26/08		42P011E ann 00/22/09
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover) ThinkPad 160GB Intel X25-M SSD <sup>41</sup>	43N3435 ann 06/22/10		43R9115 ann 09/23/08
		up to 13.3 widescreen models.	
USB 2.0 Portable 320GB Hard Disk	45K1689 ann 03/17/09		41U5062 ann 05/13/08
USB 2.0 Portable 500GB Hard Disk	45K1690 ann 05/26/08		
USB 2.0 Portable Secure 160GB Hard Disk USB 2.0 Portable Secure 320GB Hard Disk	43R2018 ann 11/18/08 43R2019 ann 11/18/08	6   Leriovo Business Messenger Case	51J0475 ann 08/18/09
eSATA/USB 2.0 Secure 500GB Hard Drive <sup>53</sup>	57Y4400 ann 01/07/10	Lenovo iviessenger iviax	41U5253 ann 05/01/07
53 USB-only attach.	37 1 4400 21111 01/01/10	Lenovo Performance BackPack	41U5254 ann 05/01/07
ooz omy amaom		ThinkPad Business Topload Case	43R2476 ann 05/13/08
Wireless WAN (Mini PCI Express)		ThinkPad Business Backpack ThinkPad Deluxe Expander Case	43R2482 ann 05/13/08 43R2478 ann 05/13/08
Only WWAN upgradable models:		Think Pad Executive Leather Case	43R2480 ann 05/13/08
ThinkPad Gobi™ 2000 Broadband Option	78Y1399 ann 01/07/10	/	
ThinkPad AT&T® Gobi 2000 Broadband Option	1 /8Y1398 <i>ann 01/0//1</i> 0		
ThinkPad Expansion		Lenovo luxury cases at www.lenovoluxuryo	cases.com
Lenovo® Essential Notebook Stand	45J9292 ann 05/12/09	Monitors	
USB Port Replicator with Digital Video	45K1610 ann 07/28/09		5453HB1 ann 06/10/10
ThinkPad X200 UltraBase	43R8781 ann 08/05/08		5047HB2 ann 10/20/09
		ThinkVision L1900p 19" Monitor	4431HE1 ann 11/11/08
Keyboard		ThinkVision L1951p Wide 19" Monitor	2448HB6 ann 10/20/09
TrackPoint Cap Collection	73P2698 ann 12/16/03		2572HB6 ann 10/20/09
USB Numeric Keypad Preferred Pro USB Keyboard	33L3225 ann 05/01/00 73P5220 ann 06/21/03		2572HD6 ann 10/20/09 2578HB6 ann 10/20/09
Enhanced Performance USB Keyboard	73P2620 ann 03/23/04		4014HB6 ann 06/10/10
Ultraslim Wireless Keyboard and Mouse <sup>52</sup>	57Y4700 ann 09/15/09		4420HB2 ann 09/17/08
52 Wireless via 2.4GHz technology using a mi		Trimite violent EE i vop vvide E i violitei	11201122 41111 00,17700
ThinkPad USB Keyboard with TrackPoint	55Y9003 ann 08/18/09	Monitor Accessories <sup>46</sup>	
Lenovo® USB Fingerprint Keyboard	73P4730 ann 02/22/05	Lenovo USB-to-DVI Monitor Adapter	45K5296 ann 05/12/09
Lenovo USB Smartcard Keyboard	51J0155 ann 03/24/09	Lenovo DisplayPort to VGA Monitor Cable <sup>50</sup>	57Y4393 ann 08/04/09
Marra		DisplayPort to Single-link DVI-D Cable <sup>50</sup>	45J7915 <i>ann 08/05/08</i>
Mouse	06D4060 ann 05/04/0	50 Can only be used via ThinkPad X200 Ultra	base (43H8/81)
Lenovo Optical Mouse (USB) Lenovo Laser Mouse (USB)	06P4069 ann 05/21/03 41U3074 ann 01/23/03	I I I I I I I I I I I I I I I I I I I	40Y7616 ann 08/23/05
ThinkPad USB Laser Mouse	57Y4635 ann 12/15/08	i minkvision Soundbar	45K1263 ann 09/16/08
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405 ann 08/27/02	Kensington MicroSaver Cable Lock	73P2582 ann 12/29/03
ThinkPad Travel Mouse (USB, Optical)		,   Kensington Twin Head Cable Lock	45K1620 ann 09/30/08
ThinkPad Bluetooth Laser Mouse	31P7410 <i>ann 06/04/02</i>		57Y4303 ann 08/24/10
	31P7410 ann 06/04/02 41U5008 ann 01/22/08	Lenovo Security Cable Lock	
		Lenovo Security Cable Lock Lenovo Easy Reach Monitor Stand	55Y9258 ann 09/22/09
Security	41U5008 ann 01/22/08	Leriovo Security Cable Lock Lenovo Easy Reach Monitor Stand  46 Compatible on selected Lenovo and Thin	55Y9258 <i>ann 09/22/09</i> kVision monitors.
Security Kensington® MicroSaver® Cable Lock	41U5008 ann 01/22/08 73P2582 ann 12/29/03	Lenovo Security Cable Lock Lenovo Easy Reach Monitor Stand  46 Compatible on selected Lenovo and Thin  More information at www.lenovo.com/supp	55Y9258 <i>ann 09/22/09</i> kVision monitors.
Security Kensington® MicroSaver® Cable Lock Kensington Twin Head Cable Lock	41U5008 ann 01/22/08 73P2582 ann 12/29/03 45K1620 ann 09/30/08	Lenovo Easy Reach Monitor Stand  46 Compatible on selected Lenovo and Thin  More information at www.lenovo.com/supp	55Y9258 ann 09/22/09 kVision monitors. cort/monitoraccessories
Security Kensington® MicroSaver® Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock	41U5008 ann 01/22/08 73P2582 ann 12/29/03 45K1620 ann 09/30/06 57Y4303 ann 08/24/10	Lenovo Security Cable Lock Lenovo Easy Reach Monitor Stand  46 Compatible on selected Lenovo and Thin More information at www.lenovo.com/supp For more information on ThinkPad accessori www.lenovo.com/support/accessories	55Y9258 ann 09/22/09 kVision monitors. cort/monitoraccessories es, please visit:
Security Kensington® MicroSaver® Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock USB Gemplus GemPC Smart Card Reader	41U5008 ann 01/22/08 73P2582 ann 12/29/03 45K1620 ann 09/30/08 57Y4303 ann 08/24/10 41N3040 ann 02/21/08	Lenovo Easy Reach Monitor Stand  46 Compatible on selected Lenovo and Thin  More information at www.lenovo.com/supp  For more information on ThinkPad accessor  www.lenovo.com/support/accessories  www.lenovo.com/support/notebookacces	55Y9258 ann 09/22/09 kVision monitors. cort/monitoraccessories es, please visit:
Security Kensington® MicroSaver® Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock	41U5008 ann 01/22/08 73P2582 ann 12/29/03 45K1620 ann 09/30/06 57Y4303 ann 08/24/10	Lenovo Security Cable Lock Lenovo Sasy Reach Monitor Stand  46 Compatible on selected Lenovo and Thin More information at www.lenovo.com/supp For more information on ThinkPad accessories www.lenovo.com/support/accessories	55Y9258 ann 09/22/09 kVision monitors. cort/monitoraccessories es, please visit:
Security Kensington® MicroSaver® Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock USB Gemplus GemPC Smart Card Reader	41U5008 ann 01/22/08 73P2582 ann 12/29/03 45K1620 ann 09/30/08 57Y4303 ann 08/24/10 41N3040 ann 02/21/08	Lenovo Easy Reach Monitor Stand  46 Compatible on selected Lenovo and Thin  More information at www.lenovo.com/supp  For more information on ThinkPad accessor  www.lenovo.com/support/accessories  www.lenovo.com/support/notebookacces	55Y9258 ann 09/22/09 kVision monitors. cort/monitoraccessories es, please visit:
Security Kensington® MicroSaver® Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock USB Gemplus GemPC Smart Card Reader ExpressCard Gemplus Smart Card Reader	41U5008 ann 01/22/08 73P2582 ann 12/29/03 45K1620 ann 09/30/08 57Y4303 ann 08/24/10 41N3040 ann 02/21/08	Lenovo Easy Reach Monitor Stand  46 Compatible on selected Lenovo and Thin  More information at www.lenovo.com/supp  For more information on ThinkPad accessories  www.lenovo.com/support/accessories  www.lenovo.com/support/notebookacces  www.lenovo.com/support/security  Other accessories at www.lenovo.com/acc	55Y9258 ann 09/22/09 kVision monitors. cort/monitoraccessories es, please visit: esories essories
Security Kensington® MicroSaver® Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock USB Gemplus GemPC Smart Card Reader ExpressCard Gemplus Smart Card Reader Multimedia	41U5008 ann 01/22/08 73P2582 ann 12/29/03 45K1620 ann 09/30/08 57Y4303 ann 08/24/10 41N3040 ann 02/21/08 41N3043 ann 06/27/08	Lenovo Easy Reach Monitor Stand  46 Compatible on selected Lenovo and Thin  More information at www.lenovo.com/supp  For more information on ThinkPad accessories  www.lenovo.com/support/accessories  www.lenovo.com/support/notebookacces  www.lenovo.com/support/security  Other accessories at www.lenovo.com/acc	55Y9258 ann 09/22/09 kVision monitors. cort/monitoraccessories es, please visit: esories essories
Security Kensington® MicroSaver® Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock USB Gemplus GemPC Smart Card Reader ExpressCard Gemplus Smart Card Reader Multimedia	41U5008 ann 01/22/08 73P2582 ann 12/29/03 45K1620 ann 09/30/08 57Y4303 ann 08/24/10 41N3040 ann 02/21/08 41N3043 ann 06/27/08	Lenovo Easy Reach Monitor Stand  46 Compatible on selected Lenovo and Thin  More information at www.lenovo.com/supp  For more information on ThinkPad accessories  www.lenovo.com/support/accessories  www.lenovo.com/support/notebookacces  www.lenovo.com/support/security  Other accessories at www.lenovo.com/acc	55Y9258 ann 09/22/09 kVision monitors. cort/monitoraccessories es, please visit: esories essories

### ThinkPad<sup>®</sup> - ThinkPlus™ Services

#### Partial list of Lenovo® ThinkPlus Services<sup>22</sup> for ThinkPad notebooks

For more information see: http://www.lenovo.com/services\_warranty/us/en/index.html

ThinkPlus service upgrade options for Thin	kPad W/X series	ThinkPlus Secure Business	
ThinkPad X100e notebook with 1-year Mail-	In warranty	Lenovo Online Data Backup	
2-year Mail-In repair service 3-year Mail-In repair service 1-year LOR <sup>24</sup> 9x5 Next Business Day 2-year LOR 9x5 Next Business Day 3-year LOR 9x5 Next Business Day	78Y1519 78Y1520 78Y1517 78Y1521 78Y1522	<ul> <li>Secure offsite data storage</li> <li>256-bit Advanced Encryption System</li> <li>Data recovery or access in case of an unfo</li> <li>Automatic, remote management</li> <li>Choose which business critical data to back</li> </ul>	sk up
		1-year Lenovo Online Data Backup - 10GB 1-year Lenovo Online Data Backup - 25GB	51J0787 51J0795
ThinkPad X100e notebook with 1-year Depo	и магганцу		
2-year parts and labor depot repair service 3-year parts and labor depot repair service	41C9169 41C9170		
1-year LOR 9x5 Next Business Day 2-year LOR 9x5 Next Business Day 3-year LOR 9x5 Next Business Day	41C9166 41C9167 41C9168		
ThinkPad X series notebook with 1-year De	oot warranty		
2-year parts and labor depot repair service 3-year parts and labor depot repair service 4-year parts and labor depot repair service 5-year parts and labor depot repair service 1-year LOR 9x5 Next Business Day 2-year LOR 9x5 Next Business Day 3-year LOR 9x5 Next Business Day	41C9169 41C9170 41C9172 41C9174 41C9166 41C9167 41C9168		
4-year LOR 9x5 Next Business Day 5-year LOR 9x5 Next Business Day	41C9171 41C9173	ThinkPlus Priority Support for enterprise c	atamara
ThinkPad W/X series notebook with 3-year I		7	
		<ul> <li>9x5 next-business-day response Lenovo On</li> <li>24x7 support with priority routing and advan-</li> </ul>	
4-year parts and labor depot repair service 5-year parts and labor depot repair service	41C9178 41C9180	ThinkPad notebook with 1-year Depot warn	
3-year LOR 9x5 Next Business Day	41C9176	3-year Priority Support	45J9094
4-year LOR 9x5 Next Business Day	41C9177	, , , , ,	
5-year LOR 9x5 Next Business Day	41C9179	ThinkPad notebook with 3-year Depot warn	•
ThinkPad W/X series notebook with 3-year (	Onsite warranty	3-year Priority Support 4-year Priority Support	45J9095 45J9096
4-year LOR 9x5 Next Business Day 5-year LOR 9x5 Next Business Day	12X5630 43R2162	5-year Priority Support 3-year Priority Support 4-hour response 4-year Priority Support 4-hour response 5-year Priority Support 4-hour response	45J9097 45J9101 45J9102 45J9103
		ThinkPad notebook with 3-year Onsite (GM	IP) warranty
ThinkPlus service upgrade options for Thin ThinkPad T/R series notebook with 1-year D 2-year parts and labor depot repair service 3-year parts and labor depot repair service 4-year parts and labor depot repair service		3-year Priority Support 4-year Priority Support 5-year Priority Support 3-year Priority Support 4-hour response 4-year Priority Support 4-hour response 5-year Priority Support 4-hour response	45J9098 45J9099 45J9100 45J9104 45J9105 45J9106
5-year parts and labor depot repair service	45K5976	ThinkPad Workstation notebook with 1-yea	r Depot warranty
1-year LOR 9x5 Next Business Day 2-year LOR 9x5 Next Business Day 3-year LOR 9x5 Next Business Day 4-year LOR 9x5 Next Business Day 5-year LOR 9x5 Next Business Day	45K5968 45K5969 45K5970 45K5973 45K5975	3-year Priority Support  ThinkPad Workstation notebook with 3-year 3-year Priority Support 4-year Priority Support	45J9107 Ir Depot warranty 45J9108 45J9109
ThinkPad T/R series notebook with 3-year D	epot warranty	5-year Priority Support 3-year Priority Support 4-hour response	45J9110 45J9114
4-year parts and labor depot repair service 5-year parts and labor depot repair service	45K6023 45K6025	4-year Priority Support 4-hour response 5-year Priority Support 4-hour response	45J9115 45J9116
3-year LOR 9x5 Next Business Day 4-year LOR 9x5 Next Business Day 5-year LOR 9x5 Next Business Day	45K6021 45K6022 45K6024	ThinkPad Workstation notebook with 3-year Onsite (GMP) warranty 3-year Priority Support	45J9111
ThinkPad T/R series notebook with 3-year C	nsite warranty	4-year Priority Support 5-year Priority Support	45J9112 45J9113
4-year LOR 9x5 Next Business Day 5-year LOR 9x5 Next Business Day	45K6038 43R2162	3-year Priority Support 4-hour response 4-year Priority Support 4-hour response 5-year Priority Support 4-hour response	45J9117 45K1520 45K1521

**Availability:** All offers subject to availability. Lenovo reserves the right to alter product offerings and specifications at any time, without notice. Lenovo is not responsible for photographic or typographic errors.

**Warranty:** For a copy of applicable product warranties, write to: Warranty Information, P.O. Box 12195, RTP, NC, 27709, Attn: Dept ZPYA/B676. Lenovo makes no representation or warranty regarding third party products or services.

#### Footnotes:

- Power management, including Intel® SpeedStep® Technology, reduces processor speed when in battery mode.
- Weight includes battery and standard optical drive; weight may vary due to vendor components, manufacturing process and options.
- Thinness may vary at certain points on the system.
- Wireless capability: Requires compatible wireless-enabled options sold separately.
- <sup>5</sup> TAA: ThinkPad notebook is compliant with the U.S. Federal Government's country-of-origin requirements prescribed in 48 C.F.R. Subpart 25.4; Trade Act Agreement (TAA) model.
- Public network download modem speeds are limited to 53Kbps. Upload speeds are limited to 48Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require compatible phone line and server equipment. Check with your telephone and ISP service providers for availability.
- Maximum memory capacity may require the replacement of standard component with largest supported component available. On ThinkPad systems, even though it is possible to physically install 4GB of memory, the actual amount of memory addressable by a 32-bit operating system will be limited to 3GB. This limitation does not exist with 64-bit operating systems.
- B Hard drive: GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.

- 9 CD/DVD drive speeds list maximum rates; rates are variable and are often less than the maximum.
- <sup>10</sup> Battery: These model numbers achieved the battery life based on MobileMark® 2007 during testing. For the ThinkPad X300, battery life is based on Business Winstone Battery Mark 2002. Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.
- 11 External monitor: This system supports a maximum of two external monitors. The integrated display(s) must be disabled to support two external monitors.
- <sup>12</sup> Limited warranty: Support unrelated to a warranty issue may be subject to additional charges.
- 13 Internet access not included.
- <sup>14</sup> Included software may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.
- <sup>16</sup> Activating Verizon Wireless Service: Lenovo customers will be contacted after purchase to activate service; requires separate agreement with Verizon Wireless and is subject to the Customer Agreement, Calling Plan, and credit approval. Service, airtime, and early termination charges may apply. Verizon Wireless, not Lenovo, is solely responsible for service. Service not available in all areas; purchaser is responsible for verifying that service is available for the intended location before purchasing a computer equipped with WAN card. Network details, coverage limitations, and maps at www.verizonwireless.com.
- <sup>17</sup> International Warranty Service is available in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.

- <sup>18</sup> Telephone support may be subject to additional charges, even during the limited warranty period. Response times may vary. May exclude some holidays. If a machine is listed as having "On-site service for select repairs", this means that onsite service is available only for the replacement of select parts. For all other warranty repairs, Lenovo will provide the customer a replacement part for customer installation. The parts for which onsite service is available varies by machine, but may include the processor, power supply, heat sink, system board, or base cover. For ThinkPad notebooks with EasyServ or Courier service, Lenovo will attempt to diagnose and resolve the problem remotely before sending a courier.
- <sup>19</sup> EasyServ depot repair service: In the United States call 1-800-426-7378. The customer may be asked certain diagnostic questions before a courier is sent. Your ThinkPad purchase includes this depot repair service, available in the U.S. during the limited warranty period.
- Operating System: Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to lenovo.com/pc/support and enter your machine type and model number for more information.
- For combination drives, maximum possible speeds only are given in the following order: CD write, CD rewrite, CD read, DVD read.

- <sup>22</sup> ThinkPlus Services: These services are available for machines normally used for business, professional, or trade purposes, rather than personal, family, or household purposes. Not all machine types and models are covered. Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. Service levels are response time objectives and are not guarantees. If the machine problem turns out to be a Customer Replaceable Unit (CRU), a part will be express shipped to you for quick replacement. Onsite 24x7x2-hour service is not available in all locations. For Think-Pad notebooks requiring LCD or other component replacement, Lenovo may choose to perform service at the depot repair center. Calls must be received by 5 pm local time in order to qualify for Next Business Day service. P&L means parts and labor, P/U means pick-up. See ThinkPlus terms and conditions for complete details and restrictions.
- 23 Activating AT&T Wireless Service:

Requires separate agreement with AT&T, subject to service agreement, rate plan and coverage maps. AT&T, not Lenovo, is solely responsible for service. Coverage not available in all areas; AT&T BroadbandConnect available in select metropolitan markets. Special credit and tenure restrictions and additional charges may apply to international roaming. A network connection, thirdparty software, additional hardware, and/ or subscription to a third-party service may be required for certain solutions/ applications. Additional restrictions apply, including early termination fee; see www.wireless.att.com for details. To activate call Lenovo Wireless Activation Hot Line at 1-877-299-4710.

- <sup>24</sup> Limited onsite service systems are designed to be repaired during the applicable warranty period primarily with customer-replaceable parts provided by Lenovo. Lenovo will only send a technician onsite to perform a repair if (a) remote telephone diagnosis and/or customer part replacement are unable to resolve the problem, or (b) the part is one of the few designated by Lenovo for onsite replacement. For a list of onsite replaceable parts, contact Lenovo. In the United States call 1-800-426-7378. Support unrelated to a warranty issue may be subject to additional charges. Lenovo onsite repair (LOR), 8 am to 5 pm, Monday through Friday coverage excluding holidays, next business day (NBD) response time.
- Full-size keyboard: As defined by ISO/ IEC 15412.
- <sup>27</sup> Based on IEEE 802.11a and 802.11b. A customer can not upgrade to a different wireless Mini PCI adapter due to FCC regulations. Security screws prevent removal of this adapter. This wireless LAN product has been designed to permit legal operation world-wide in regions which it is approved. This product has been tested and certified to be interoperable by the Wireless Ethernet Compatibility Alliance and is authorized to carry the Wi-Fi logo.

- The IEEE 802.11n specification (MIMO) has been finalized and is currently in IEEE 802.11n-2009 release. The maximum speed depends on the access point device and the number of integrated antenna used for connection. An adapter with 11a/b, 11a/b/g, 11b/g/n, or 11a/b/g/n can communicate on any of its supported formats.
- <sup>30</sup> Measures only maximum data transfer rate, not application performance. Many factors affect application performance.

- Wireless: Based on IEEE 802.11a, 802.11b, and 802.11g respectively. An adapter with 11a/b, 11b/g, or 11a/b/g can communicate on either/any of these listed formats respectively, the actual connection will be based on the access point to which it connects.
- <sup>36</sup> Wireless upgradable allows the system to be wireless-enabled with an optional wireless Mini PCI or Mini PCI Express card. Designed to operate only with Lenovo options.
- <sup>37</sup> Optimus graphics Optimus only switches in Windows 7 environment. It performs as discrete graphics in Windows Vista or Windows XP Professional environment.

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January 2011 tabook.pdf



# Personal Systems Reference Lenovo® ThinkPad® Edge Series and SL Series TopSeller™ Notebooks

January 2011 - Version 391



# ThinkPad<sub>®</sub>



Lenovo® ThinkPad Edge 13"



Lenovo ThinkPad Edge 13" (Glossy black model)



Lenovo ThinkPad Edge 13" (Glossy red model)



ThinkPad Battery 73+ (6-cell) 57Y4565 ThinkPad Battery 73 (4-cell) 57Y4564



USB 2.0 Portable DVD Burner 43N3264



Lenovo ThinkPad Edge 13"

-	Гуре-model	Processor	GHz	Memory	Wide- screen display		Integrated graphics	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	PCIe Mini Card WWAN	Top color	Blue- tooth	Battery cells	Preload	Avail date
(	0196-24U	SU7300	1.30	3GB	13.3" HD	0.3M	GMA	320G 7200	Intel 1000	None	Matte black	Blue	6	Pro 32	Jan 10
(	0196-4YU	SU7300	1.30	3GB	13.3" HD	0.3M	GMA	320G 7200	Intel 1000	None	Glossy black	Blue	6	Pro 32	Jan 10
E3 (	0196-5DU	SU7300	1.30	2GB	13.3" HD	0.3M	GMA	250G 5400	Intel 1000	None	Glossy red		6	Pro 32	Apr 10
E3 (	0196-5EU	SU7300	1.30	3GB	13.3" HD	0.3M	GMA	250G 5400	WiMAX	None	Matte black	Blue	6	Pro 32	Apr 10
133 (	0196-5FU	SU7300	1.30	2GB	13.3" HD	0.3M	GMA	250G 5400	Intel 1000	None	Matte black		6	Home P 64	Apr 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; one spindle Intel® Core™ 2 Duo processor SU7300 with ultra low voltage, dual-core, 800MHz system bus, and 3MB L2 cache	Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7 Home Premium 64
Memory	<b>2GB</b> or <b>3GB</b> std / 4GB max <sup>7</sup> / PC3-8500 1066MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; standard memory in one socket; one socket available	- Some: Genuine Windows 7 Professional 32 <b>Preloaded applications</b> <sup>14</sup> (only some listed)
Optical drive SATA disk	None (use optional USB Portable DVD Burner 43N3264) <b>250GB</b> <sup>8</sup> (5400 rpm) or <b>320GB</b> (7200 rpm) / SATA 1.5Gb/s or 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	<ul> <li>Rescue and Recovery™</li> <li>Access Connections™</li> <li>Password Manager</li> <li>ThinkVantage Power Manager</li> </ul>
Widescreen display Camera	13.3" (338mm) HD (1366x768) color, VibrantView (glossy), LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio Camera on top of screen, 0.3-megapixel, low light sensitive	<ul> <li>ThinkVantage System Update</li> <li>ThinkVantage Toolbox</li> <li>Norton™ Internet Security 2009 (30 days of virus definitions)</li> </ul>
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; Max external resolution: 2048x1536@75Hz	<ul> <li>Adobe® Reader®</li> <li>Adobe Flash® Player</li> <li>Skype™ for Windows</li> <li>Microsoft Office 2010 preloaded; purchase product key to activate</li> </ul>
Keyboard TrackPoint® Touch pad	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³ UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch	Microsoft Research AutoCollage Touch
ThinkLight™	None	
Dimensions <sup>3</sup> Weight <sup>2</sup>	13.3W" (WxDxH): 12.7" x 9.0" x 1.0"; 322 x 228mm x 25.4mm (excluding battery bump) 4-cell: starting at 3.59 lb (1.63kg); 6-cell: starting at 3.81 lb (1.73kg)	Supports ThinkVantage® technologies
Case color	Matte black (top), glossy black (top), or glossy red (top), trimmed with a thin silver band (side); black bottom	65-watt AC adapter
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic	EPEAT™ Gold rating
Battery - type <sup>37</sup> Battery - life <sup>10</sup>	Lithium Ion 6-cell	ENERGY STAR® 5.0-compliant RoHS-compliant
Chipset	4-cell: up to 5.3 hr; 6-cell: up to 8.0 hr  Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub);	International Warranty Service <sup>17</sup>
Onipset	ICH9M I/O Controller Hub	24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup>
ExpressCard	None	via 800-426-7378
Smart Card Read Multicard Reader	5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, XD)	
Ports	Three USB 2.0 (one powered), external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	ThinkPlus™.22 1-year LOR24 9x5 NBD 45K5968
PCIe Mini Card Intel 1000	Two PCI Express Mini Card slots  Some: 11b/g/n wireless <sup>4</sup> , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2	ThinkPlus 2-year LOR 9x5 NBD 45K5969
WiMAX	Some: 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX	ThinkPlus 3-year LOR 9x5 NBD 45K5970
WWAN upg Modem	None None	ThinkPlus 4-year LOR 9x5 NBD
Bluetooth™ Ethernet	Some: Bluetooth 2.1 wireless Realtek® RTL8111DL Gigabit Network Connection	45K5973 ThinkPlus 2-year P&L P/U Depot 45K5971
Intel AMT	None	ThinkPlus 3-year P&L P/U Depot
Audio support	High Definition (HD) Audio, Conexant® CX20582 codec / stereo speakers, 1 watt x 2/ mono microphone, combo audio/mic jack	45K5972 ThinkPlus 4-year P&L P/U Depot
Security obje	Power-on password, hard disk password, supervisor password, security keyhole	45K5974
Security chip Fingerprint reader	None r None	Post-warranty annual maintenance agreements at
Limited warranty <sup>12</sup>	<sup>2</sup> 1-year - depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	PCle Mini Card WWAN	Top color		Battery cells	Preload	Avail date
0197-26U 0197-27U 0197-6XU	L325 L325 L325	1.50 1.50 1.50	3GB	13.3" HD	0.3M	HD 3200	250G 5400 250G 5400 250G 5400	11b/g/n	None	Matte black Matte black Glossy black	None None None	4 6 6	Home P 64 Pro 32 Pro 32	Jan 10 Jan 10 Jan 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; one spindle AMD® Athlon™ Neo X2 Dual-Core processor L325 with dual-core, virtualization technology, integrated DDR2 memory controller, and 1MB L2 cache	Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7 Home Premium 64				
Memory	<b>2GB</b> or <b>3GB</b> std / 4GB max <sup>7</sup> / PC2-5300 667MHz <b>DDR2</b> , non-parity, dual-channel capable, two 200-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	- Some: Genuine Windows 7 Professional 32 Preloaded applications <sup>14</sup> (only some listed)				
Optical drive SATA disk	None (use optional USB Portable DVD Burner 43N3264) <b>250GB</b> <sup>8</sup> (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	Rescue and Recovery™     Access Connections™     Password Manager     ThinkVantage Power Manager				
Widescreen display Camera	13.3" (338mm) HD (1366x768) color, VibrantView (glossy), LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio Camera on top of screen, 0.3-megapixel, low light sensitive	ThinkVantage System Update ThinkVantage Toolbox Lenovo Online Data Backup Adobe® Reader®				
Integrated graphics	ATI™ Radeon™ HD 3200 graphics, in M780G, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; Max external resolution: 2456x1536@60Hz	Adobe Flash® Player     Skype™ for Windows     Microsoft Office 2010 preloaded; purchase product key to activate     Microsoft Research AutoCollage				
Keyboard TrackPoint® Touch pad	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³ UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch	Touch Supports ThinkVantage® technologies				
ThinkLight™  Dimensions³ Weight² Case color  Case material	None  13.3W" (WxDxH): 12.7" x 9.0" x 1.0"; 322 x 228mm x 25.4mm (excluding battery bump) 4-cell: starting at 3.61 lb (1.64kg); 6-cell: starting at 3.83 lb (1.74kg) Matte black (top) or glossy black (top), trimmed with a thin silver band (side); black bottom Acrylonitrile-Butadiene-Styrene (ABS) plastic	65-watt AC adapter  EPEAT™ Gold rating  ENERGY STAR® 5.0-compliant  RoHS-compliant  International Warranty Service¹7  24 hour x 7 day¹8 toll-free support				
Battery - type <sup>37</sup> Battery - life <sup>10</sup>	Lithium Ion 4-cell or 6-cell L325 models with 4-cell: up to 3.3 hr; 6-cell: up to 5.0 hr	during the warranty period <sup>12</sup> via 800-426-7378				
Chipset ExpressCard Smart Card Read Multicard Reader	AMD M780G Chipset, SB710 south bridge None None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, XD)	ThinkPlus <sup>TM. 22</sup> 1-year LOR <sup>24</sup> 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD				
Ports PCle Mini Card 11b/g/n	Three USB 2.0 (one powered), external monitor (VGA DB-15, HDMI), ethernet (RJ-45)  Two PCI Express Mini Card slots 11b/g/n wireless <sup>4</sup> , ThinkPad 11b/g/n, PCIe Half Mini Card, Realtek <sup>®</sup> RTL8191SE	45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD				
WWĀN upg Modem Bluetooth™	None None None	45K5973 ThinkPlus 2-year P&L P/U Depot 45K5971				
Ethernet Audio support Security	Realtek RTL8111DL Gigabit Network Connection High Definition (HD) Audio, Conexant® CX20582 codec / stereo speakers, 1 watt x 2/ mono microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole	ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot				
Security chip Fingerprint reader	None None	45K5974 Post-warranty annual maintenance agreements at				
Limited warranty <sup>12</sup>	<sup>2</sup> <b>1-year</b> - depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty				

# ThinkPad® Edge 13" Accessories

Memory			Batteries <sup>37</sup>			
0196 with Intel processors:	==\ <b>/</b> 0==0	00/00/00	ThinkPad Battery 73 (4-cell)	57Y4564		
1GB PC3-8500 DDR3 Low-Halogen SODIMM			ThinkPad Battery 73+ (6-cell)	57Y4565		
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack			ThinkPad External Battery Charger <sup>44</sup> 44 Requires the <i>ThinkPad 90W AC Adapter</i>	40Y7625	ann	09/20/05
2GB PC3-8500 DDR3 Low-Halogen SODIMM 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack			40Y7659 or the adapter provided with the			
1GB PC3-10600 DDR3 L-H SODIMM		ann 03/02/10	' '	,		
1GB PC3-10600 DDR3 L-H SODIMM (25Pack			More information at www.lenovo.com/allda	ıycomputii	ng	
2GB PC3-10600 DDR3 L-H SODIMM		ann 03/02/10	ThinkPad 65W AC Adapter 45	40Y7696	ann	01/05/06
2GB PC3-10600 DDR3 L-H SODIMM (25Pack			<sup>45</sup> Only compatible with the integrated graph			0 17 0 07 0 0
,	,		ThinkPad 90W AC Adapter	40Y7659		09/20/05
0197 with AMD processors: 1GB PC2-5300 DDR2 SODIMM	40V7724	ann 01/05/06	Lenovo Power Hub	57Y4600	ann	09/07/10
1GB PC2-5300 DDR2 SODIMM (25-Pack)		ann 03/17/09	90W Ultraslim AC/DC Combo Adapter	41R4493	ann	09/22/09
2GB PC2-5300 DDR2 SODIMM		ann 11/28/06	More info at www.lenovo.com/support/pov	veradante	re	
2GB PC2-5300 DDR2 SODIMM (25-Pack)		ann 03/17/09	· · · · ·			
(			Charging tips for 90W Ultraslim AC/DC Com			
Storage and removable storage			•iPod and iPhone Charge Tip (L10a)	41R4481		
USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09	<ul> <li>Generic Micro USB charge tip (L18)</li> </ul>	41R4490	ann	01/06/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09	More information at www.lenovopowertips	.com		
USB 2.0 Portable Secure 160GB Hard Disk		ann 11/18/08				
USB 2.0 Portable Secure 320GB Hard Disk		ann 11/18/08	Carrying Cases			
eSATA/USB 2.0 Secure 500GB Hard Drive <sup>53</sup>		ann 01/07/10	ThinkPad 15W Case Sleeve	51J0477		
USB 2.0 Portable DVD Burner	43N3264	ann 01/05/10	Lenovo Business Messenger Case	51J0475		
53 USB-only attach.			Lenovo Messenger Max	41U5253		
T			Lenovo Performance BackPack	41U5254		
ThinkPad Expansion	45 10000	05/40/00	ThinkPad Business Topload Case	43R2476		
Lenovo® Essential Notebook Stand		ann 05/12/09	ThinkPad Business Backpack	43R2482		
USB Port Replicator with Digital Video	45K1610	ann 07/28/09	ThinkPad Deluxe Expander Case	43R2478		
Vouboard			ThinkPad Executive Leather Case	43R2480	ann	05/13/08
Keyboard TrackPoint Cap Collection	73P2608	ann 12/16/03	More information at www.lenovo.com/supp	ort/cases		
USB Numeric Keypad		ann 05/01/00				
Preferred Pro USB Keyboard		ann 06/21/05	Monitors	<del>_</del> .		,,_,_
Enhanced Performance USB Keyboard		ann 03/23/04	Lenovo L2230x Wide 21.5" Monitor	5453HB1		
Lenovo Mini Wireless Keyboard N5901 <sup>52</sup> (blk)		aiiii 00/20/0 /	ThinkVision® L1711p 17" Monitor	5047HB2		
Ultraslim Wireless Keyboard and Mouse <sup>52</sup>		ann 09/15/09	ThinkVision L1900p 19" Monitor	4431HE1		
52 Wireless via 2.4GHz technology using a mi			ThinkVision L1951p Wide 19" Monitor	2448HB6		
ThinkPad USB Keyboard with TrackPoint		ann 08/18/09	ThinkVision L2250p Wide 22" Monitor	2572HB6		
Lenovo USB Fingerprint Keyboard	73P4730	ann 02/22/05	ThinkVision L2251p Wide 22" Monitor ThinkVision L2251x Wide 22" Monitor	2572HD6 2578HB6		
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09	ThinkVision L2321x Wide 22 Monitor	4014HB6		
			ThinkVision L2440p Wide 24" Monitor	4420HB2		
Mouse	0004000	05/04/00	THINK VIOLOTI EET TOP TVIGO ET MOTILOT	11201122	am.	00/11/00
Lenovo Optical Mouse (USB)		ann 05/21/03	Monitor Accessories <sup>46</sup>			
Lenovo Laser Mouse (USB)		ann 01/23/07	Lenovo USB-to-DVI Monitor Adapter	45K5296	ann	05/12/09
ThinkPad USB Laser Mouse		ann 12/15/09	ThinkVision USB Soundbar	40Y7616	ann	08/23/05
Lenovo ScrollPoint® Mouse (USB, Optical) ThinkPad Travel Mouse (USB, Optical)		ann 08/27/02   ann 06/04/02	ThinkVision Soundbar	45K1263	ann	09/16/08
ThinkPad Bluetooth Laser Mouse		ann 01/22/08	Kensington MicroSaver Cable Lock	73P2582	ann	12/29/03
Lenovo Wireless Laser Mouse - Black <sup>52</sup>		ann 11/25/08	Kensington Twin Head Cable Lock	45K1620		
Lenovo Wireless Laser Mouse - Black Lenovo Wireless Laser Mouse - Red/Black <sup>52</sup>		ann 11/25/08	Lenovo Security Cable Lock	57Y4303		
Lenovo Optical Mouse A6010 (black)	57Y6255	ann 11/25/00	Lenovo Easy Reach Monitor Stand	55Y9258		
Lenovo Mini Optical Mouse M20B	55Y2091		<sup>46</sup> Compatible on selected Lenovo and Thin	kVision mo	onitors	6.
Lenovo Wireless Mouse N30B (black)	55Y9360					
	30.3000		More information at www.lenovo.com/supp	ort/monite	oracc	essories
Security						
Kensington® MicroSaver® Cable Lock	73P2582	ann 12/29/03				
Kensington Twin Head Cable Lock		ann 09/30/08				
Lenovo Security Cable Lock	57Y4303	ann 08/24/10				
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06				
			, .,			
Multimedia	F7\/440C	04/07/45	For more information on ThinkPad accessor	ies, please	visit:	
ThinkPad In-Ear Headphones		ann 01/07/10	www.lenovo.com/support/accessories			
Lenovo Mini Speaker M220	55Y2033		www.lenovo.com/support/notebookacces	sories		
Lenovo Headphone P550	55Y2065		www.lenovo.com/support/security			
Modem			Other accessories at www.lenovo.com/acc	essories		
USB 2.0 Lenovo Modem	43B1814	ann 02/26/08	Accessories Guide pdf at www.lenovo.com/		esaui	de
335 2.0 LONOVO MIGGORII	10111014	a 02/20/00	7.0000001100 Gallac pal at www.iciiovo.com/		Jogui	





Lenovo® ThinkPad Edge 14"





Lenovo ThinkPad Edge 14"



USB Port Replicator with Digital Video 45K1610



Type-model Process	sor GHz	Memory	Wide- screen display	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Top color		Blue- ter		Avail date	
0578-23U i3-350i  0578-25U i3-330i  0578-27U i3-330i  0578-29U i3-330i  0578-28U i3-330i  0578-28U i3-330i  0578-66U i3-330i  0578-64U Cel P4  0578-7ZU Cel P4  0578-82U i3-330i  0578-82U i3-330i  0578-83U i3-330i  0578-84U i3-330i  0578-84U i3-330i  0578-84U i3-330i  0578-85U i3-330i  0578-85U i3-330i  0578-86U i3-350i	M 2.26 M 2.13 M 2.13 M 2.13 M 2.13 M 2.13 M 2.13 M 2.13 500 1.86 500 1.86 500 1.86 M 2.13 M 2.13	2+1GB 2GBx2 2GBx1 2GBx2 2GBx2 2GBx2 2+1GB 2GBx1 2GBx1 2GBx1 2+1GB 2+1GB 2+1GB 2GBx1 2GBx1 2GBx1 2GBx2 2GBx2	14.0" HD 14.0" HD	320G 7200 250G 5400 250G 5400 250G 5400 250G 5400 320G 7200 320G 7200 320G 7200 250G 5400 250G 5400	Intel 6200 <sup>28</sup> 11b/g/n Intel 1000	Gobi 2000 Gobi 2000 Gobi 2000	AT&T <sup>23</sup> Verizon <sup>16</sup> AT&T	Matte black Matte black Glossy black Matte black Glossy black Matte black Matte black Glossy black	Finger	Blue 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	Pro 64 Home P 64 Pro 32 Home P 64 Pro 64 Pro 64 Home P 64 Home P 64 Pro 32 Home P 64 Pro 32 Pro 32 Pro 32 Home P 64 Pro 64	Mar 10 Mar 10 Mar 10 Mar 10 Mar 10 Mar 10 Mar 10 Apr 10 Apr 10 Apr 10 Apr 10 Apr 10 Apr 10 Apr 10 Apr 10	
Positioning Processor	Sophistica Intel® Ce DMI (Dire and 2MB Intel Cor DMI (Dire	ated designer designe	n with qual rocessor F Interface), ocessor i3 Interface),	ity, durability appearance of the control of the co	and reliability ual-core, DR3 memor	for SMB custy controller	tomers; to	wo spindles 66MHz),	- Some - Some	e: Genuin Home I e: Genuin Profess e: Genuin	eting system e Windows® : Premium 64 e Windows 7 sional 32 e Windows 7 sional 64	7	
Memory SATA DVD±RW SATA disk	Memory  2GB, 3GB, or 4GB std / 8GB max <sup>7</sup> / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets  SATA DVD±RW  DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in						,	Preloaded applications¹⁴ (only some listed)  ■ Rescue and Recovery™  ■ Access Connections™  ■ Password Manager  ■ ThinkVantage Power Manager  ■ ThinkVantage System Update					
display Camera Integrated graphics	Camera on top of screen, 2.0-megapixel, fixed focus  Intel HD Graphics in processor,						ontent);	<ul> <li>ThinkVantage Toolbox</li> <li>Norton™ Internet Security 2011         (30 days of virus definitions)</li> <li>Adobe® Reader®</li> <li>Adobe Flash® Player</li> <li>Skype™ for Windows</li> <li>Microsoft Office 2010 preloaded; purchase product key to activate</li> </ul>					
Keyboard TrackPoint® Touch pad ThinkLight™	6-row, sp TrackPoir UltraNav wide toud None	ill-resista nt®pointin ™, ch pad be	nt, multime ig device, I low keyboa	edia Fn keys nternet Scrol ard, Tap Zone	l Bar <sup>13</sup> es, multi-toud	ch		_	<ul> <li>Micro Touch</li> </ul>	Microsoft Research AutoCollage Touch			
	### 14.0W" (WxDxH): 13.54" x 9.17" x 1.25-1.46"; 344 x 233mm x 31.8-37.0mm  ### 4-cell: from 4.72 lb (2.14kg); 6-cell: from 4.9 lb (2.22kg); 9-cell: from 5.29 lb (2.40kg)  ### Matte black (top), glossy black (top), or glossy red (top),  ### trimmed with a thin silver band (side); black bottom  ### Acrylonitrile-Butadiene-Styrene (ABS) plastic  ### Lithium Ion 4-cell or 6-cell  ### 4-cell: up to 2.9 hr; 6-cell: up to 4.5 hr  ### Mobile Intel HM55 Express Chipset  ### One ExpressCard/34  ### Ulticard Reader  ### Mobile Intel HM55 Express Chipset  ### One ExpressCard/34  ### 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)			lb (2.40kg)	Supports ThinkVantage® technologies  65-watt AC adapter EPEAT™ Gold rating (except Celeron models) ENERGY STAR® 5.0-compliant (except Celeron models) RoHS-compliant International Warranty Service¹ 24 hour x 7 day¹8 toll-free support during the warranty period¹²								
Ports  PCle Mini Card 11b/g/n Intel 1000 Intel 6200 <sup>28</sup> Gobi™ 2000  Carrier	external I Two PCI Some: 1 Some: 1 Some: 1 Some: V C Some: A	monitor (\ Express I 1b/g/n w 1b/g/n wi 1a/b/g/n Vireless \ GPRS/W(	VGA DB-15 Mini Card s ireless <sup>4</sup> , Th ireless, PC wireless, P VAN, Qualo DDMA/HSF	5, HDMI), eth	ernet (RJ-45 g/n, PCIe Ha Card, Intel Ce i Card, Intel ( t, PCIe Mini tract required	If Mini Card entrino® Wire Centrino Adv Card, EV-DO d with servic	vanced-N O Rev. A, e provide	6200, 2x2	ThinkPl ThinkPl ThinkPl	us 2-year us 3-year	year LOR <sup>24</sup> 9: 45 LOR 9x5 NE 45 LOR 9x5 NE 45 LOR 9x5 NE	K5968 BD K5969 BD K5970 BD	
Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	lodem   None   Some: Bluetooth 2.1 wireless   Realtek® RTL8111DL Gigabit Network Connection   None   High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/ mono digital microphone, combo audio/mic jack   Power-on password, hard disk password, supervisor password, security keyhole						45K5973 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty						

Type-model	Processor	GHz	Max turbo (GHz) Me	emory	Wide- screen display	Disk SATA GB <sup>®</sup> rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier			Blue-	Bat- tery cells	Preload		vail date
0578-9KU	i3-350M	2.26	40	GB ·	14.0" HD	500G 5400	Intel 1000			Matte black			6	Home P 64	May	/ 10
0578-DGU	i3-350M	2.26	20	GB ·	14.0" HD	320G 7200	Intel 1000			Glossy red			6	Pro 64	May	/ 10
0578-DHU	i3-350M	2.26	40	GB ·	14.0" HD	500G 5400	Intel 1000			Glossy red			6	Pro 64	May	/ 10
☞ 0578-F5U	i3-370M	2.40	20	GB '	14.0" HD	250G 5400	Intel 1000			Matte black			6	Pro 64	Jul	10
☞ 0578-F6U	i3-370M	2.40	40	GB ·	14.0" HD	320G 7200	Intel 1000			Matte black			6	Pro 64	Jul	10
☞ 0578-F7U	i3-370M	2.40	40	GB ·	14.0" HD	320G 7200	Intel 1000			Matte black	Fing	Blue	6	Pro 64	Jul	10
☞ 0578-F8U	i3-370M	2.40	40	GB '	14.0" HD	320G 7200	Intel 1000	Gobi 2000	$AT&T^{23}$	Matte black	Fing	Blue	6	Pro 64	Jul	10
☞ 0578-F9U	i3-370M	2.40	40	GB '	14.0" HD	320G 7200	Intel 1000			Glossy red	Fing	Blue	6	Pro 64	Jul	10
☞ 0578-HTU	i3-350M	2.26	40	GB '	14.0" HD	250G 5400	Intel 1000			Matte black	_		4	Home P 64	Jul	10
☞ 0578-HUU	i3-370M	2.40	40	GB '	14.0" HD	250G 5400	Intel 1000			Matte black			4	Home P 64	Jul	10
☞ 0578-HVU	i3-350M	2.26	40	GB '	14.0" HD	320G 5400	Intel 1000			Glossy black			4	Home P 64	Jul	10
☞ 0578-HWU	i3-370M	2.40	40	GB '	14.0" HD	320G 5400	Intel 1000			Glossy black			4	Home P 64	Jul	10
☞ 0578-HXU	i5-450M	2.40	2.66 40	GB '	14.0" HD	500G 5400	Intel 1000			Glossy black	Fing	Blue	6	Pro 64	Jul	10
<b>&lt;</b> 0578-HZU	i3-350M	2.26	40	GB '	14.0" HD	500G 5400	Intel 1000			Glossy black			6	Pro 64	Jul	10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

	These systems are microsoft. Since 2010 Floudet Rey fleady (Office Rif)	
Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Core™ i3 processor i3-350M or i3-370M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache or Intel Core i5 processor i5-450M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7 Home Premium 64 - Some: Genuine Windows 7 Professional 64  Preloaded applications <sup>14</sup> (only some
Memory	<b>2GB</b> or <b>4GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; standard memory in both sockets; no sockets available; standard memory in one socket; one socket available	Rescue and Recovery™     Access Connections™     Password Manager     ThinkVantage Power Manager
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in <b>250GB</b> <sup>®</sup> (5400 rpm), <b>320GB</b> (5400 or 7200 rpm), or <b>500GB</b> (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	<ul> <li>ThinkVantage System Update</li> <li>ThinkVantage Toolbox</li> <li>Norton™ Internet Security 2011         <ul> <li>(30 days of virus definitions)</li> </ul> </li> <li>Adobe® Reader®</li> </ul>
Widescreen display Camera	14.0" (355mm) HD (1366x768) color, VibrantView (glossy), LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	Adobe Flash® Player     Skype™ for Windows     Microsoft Office 2010 preloaded;
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; Max external resolution: 2048x1536@75Hz; 1920x1080 (HDMI port)	purchase product key to activate  Microsoft Research AutoCollage Touch
Keyboard TrackPoint® Touch pad	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³ UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch	
ThinkLight™ Dimensions³	None 14.0W" (WxDxH): 13.54" x 9.17" x 1.25-1.46": 344 x 233mm x 31.8-37.0mm	Supports ThinkVantage® technologies
Weight <sup>2</sup> Case color Case material Battery - type <sup>37</sup> Battery - life <sup>10</sup>	4-cell: from 4.72 lb (2.14kg); 6-cell: from 4.9 lb (2.22kg); 9-cell: from 5.29 lb (2.40kg) Matte black (top), glossy black (top), or glossy red (top), trimmed with a thin silver band (side); black bottom Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium lon 4-cell or 6-cell 4-cell: up to 2.9 hr; 6-cell: up to 4.5 hr	65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹7
Chipset ExpressCard/34 Multicard Reader Ports	Mobile Intel HM55 Express Chipset One ExpressCard/34 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three LISB 2 0 (one powered), one LISB 2 0(eSATA combo port	24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup> via 800-426-7378
Ports PCle Mini Card	Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)  Two PCI Express Mini Card slots	ThinkPlus™.22 1-year LOR24 9x5 NBD 45K5968
Intel 1000 Gobi™ 2000	11b/g/n wireless <sup>4</sup> , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 Some: Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A,	ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD
Carrier Modem	GPRS/WCDMA/HSPA, GPS, contract required with service provider Some: AT&T®, contract required with service provider None	45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973
Bluetooth™ Ethernet	Some: Bluetooth 2.1 wireless Realtet® RTL8111DL Gigabit Network Connection	ThinkPlus 2-year P&L P/U Depot 45K5971
Intel AMT Audio support	None High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/ mono digital microphone, combo audio/mic jack	ThinkPlus 3-year P&L P/U Depot 45K5972
Security Security chip	Power-on password, hard disk password, supervisor password, security keyhole None	ThinkPlus 4-year P&L P/U Depot 45K5974 Post-warranty annual maintenance
	r Some: UPEK Fingerprint reader on palm rest, swipe sensor  2 1-year - depot repair service / service upgrades <sup>22</sup> available	agreements at lenovo.com/thinkplus/warranty
varianty	- Juli departional control of solution application available	1.5710 TOTO TOTO THE TRANSPORT OF TRANSPORT

Type-model	Processor	GHz	Max turbo (GHz)		Wide- screen display	Screen type	Disk SATA GB <sup>®</sup> rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Top color	Finger print reader	Blue-	Preload	Avail date
0578-N6U 0578-N8U						,	320G 7200 250G 5400				Matte black Matte black	_	Blue		Jan 11 Jan 11
							320G 7200				Matte black				
0578-P4U 0578-Q2U 0578-QLU	i3-380M	2.53		2GB		,	320G 7200 250G 5400 250G 5400	11b/g/n	Gobi 2000	AT&T <sup>23</sup>	Glossy black Matte black Matte black	_	Blue	Pro 64	Jan 11 Jan 11 Jan 11

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Core™ i3 processor i3-380M or i3-390M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache or Intel Core i5 processor i5-480M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Genuine Windows® 7 Professional 64 Preloaded applications¹⁴ (only some listed) ■ Rescue and Recovery™ ■ Access Connections™
Memory	2GB or 4GB std / 8GB max <sup>7</sup> / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; ltalics: standard memory in both sockets; no sockets available; standard memory in one socket; one socket available	Password Manager     ThinkVantage Power Manager     ThinkVantage System Update     ThinkVantage Toolbox
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in <b>250GB</b> <sup>®</sup> (5400 rpm) or <b>320GB</b> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	Norton™ Internet Security 2011 (30 days of virus definitions)     Adobe® Reader®     Adobe Flash® Player
Widescreen display	Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 14.0" (355mm) HD (1366x768) color, VibrantView (glossy), LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio	Skype™ for Windows     Microsoft Office 2010 preloaded; purchase product key to activate     Microsoft Research AutoCollage     Touch
Camera	Camera on top of screen, 2.0-megapixel, fixed focus	
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; Max external resolution: 2048x1536@75Hz; 1920x1080 (HDMI port)	
Keyboard TrackPoint® Touch pad	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³ UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch	
ThinkLight™	None	
Dimensions <sup>3</sup> Weight <sup>2</sup> Case color	14.0W" (WxDxH): 13.54" x 9.17" x 1.25-1.46"; 344 x 233mm x 31.8-37.0mm 4-cell: from 4.72 lb (2.14kg); 6-cell: from 4.9 lb (2.22kg); 9-cell: from 5.29 lb (2.40kg)	Supports ThinkVantage® technologies
Case material Battery - type <sup>37</sup> Battery - life <sup>10</sup>	Matte black (top) or glossy black (top), trimmed with a thin silver band (side); black bottom Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion <b>6-cell</b> 4-cell: up to 2.9 hr; 6-cell: up to 4.5 hr	65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant
Chipset ExpressCard/34 Multicard Reader Ports	Mobile Intel HM55 Express Chipset One ExpressCard/34 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup> via 800-426-7378
PCIe Mini Card	Two PCI Express Mini Card slots	ThinkPlus™.22 1-year LOR24 9x5 NBD   45K5968
11b/g/n Intel 1000	Some: 11b'g/n wireless <sup>4</sup> , ThinkPad 11b/g/n, PCIe Half Mini Card Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2	ThinkPlus 2-year LOR 9x5 NBD 45K5969
Gobi™ 2000	Some: Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider	ThinkPlus 3-year LOR 9x5 NBD 45K5970
Carrier Modem	Some: AT&T®, contract required with service provider None	ThinkPlus 4-year LOR 9x5 NBD
Bluetooth™ Ethernet	Some: Bluetooth 2.1 wireless Realtek® RTL8111DL Gigabit Network Connection	45K5973 ThinkPlus 2-year P&L P/U Depot 45K5971
Intel AMT Audio support	None High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/	ThinkPlus 3-year P&L P/U Depot 45K5972
Security Security chip	mono digital microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole None	ThinkPlus 4-year P&L P/U Depot 45K5974
Fingerprint reade	r Some: UPEK Fingerprint reader on palm rest, swipe sensor	Post-warranty annual maintenance agreements at
Limited warranty <sup>12</sup>	<sup>2</sup> <b>1-year</b> - depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty

Type-model Processor GHz			Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	Top color	Finger print reader	Blue- tooth	Bat- tery cells	Preload	Avail date
0199-4GU	P340	2.20	2GB	14.0" HD	0.3M	320G 7200	11b/g/n	Matte black	None	None	6	Pro 64	Sep 10
0199-4HU	P340	2.20	2GB	14.0" HD	0.3M	320G 7200	11b/g/n	Glossy red	None	None	6	Pro 64	Sep 10
0199-4JU	P540	2.40	2GB	14.0" HD	0.3M	320G 7200	11b/g/n	Matte black	None	None	6	Pro 64	Sep 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles AMD® Athlon™ II Dual-Core Mobile Processor P340 with dual-core, virtualization technology, integrated DDR3 memory controller, and 1MB L2 cache or AMD Turion™ II Dual-Core Mobile Processor P540 with dual-core, virtualization technology, integrated DDR3 memory controller, and 2MB L2 cache	Preloaded operating system <sup>20</sup> - Genuine Windows® 7 Professional 64 Preloaded applications <sup>14</sup> (only some
Memory	2GB std / 8GB max <sup>7</sup> / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in one socket; one socket available	listed)  ■ Rescue and Recovery™  ■ Access Connections™  ■ Password Manager
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in <b>320GB</b> <sup>®</sup> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	<ul> <li>ThinkVantage Power Manager</li> <li>ThinkVantage System Update</li> <li>ThinkVantage Toolbox</li> <li>Adobe® Reader®</li> </ul>
Widescreen display Camera	14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 0.3-megapixel, fixed focus	<ul> <li>Adobe Flash® Player</li> <li>Skype™ for Windows</li> <li>Microsoft Office 2010 preloaded; purchase product key to activate</li> </ul>
Integrated graphics	ATI™ Radeon™ HD 4250 graphics, in RS880M, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; Max external resolution: 2456x1536 @ 60Hz	Microsoft Research AutoCollage Touch
Keyboard TrackPoint®	6-row, spill-resistant, multimedia Fn keys	Supports ThinkVantage® technologies
Touch pad ThinkLight™	TrackPoint® pointing device, Internet Scroll Bar¹³ UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch None	65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant
Dimensions <sup>3</sup> Weight <sup>2</sup> Case color Case material Battery - type <sup>37</sup> Battery - life <sup>10</sup>	14.0W" (WxDxH): 13.54" x 9.17" x 1.25-1.46"; 344 x 233mm x 31.8-37.0mm 4-cell: from 4.78 lb (2.17kg); 6-cell: from 4.96 lb (2.25kg); 9-cell: from 5.36 lb (2.43kg) Matte black (top) or glossy red (top), trimmed with a thin silver band (side); black bottom Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium lon 6-cell 4-cell: up to 2.6 hr; 6-cell: up to 4 hr; 9-cell: up to 6 hr	RoHS-compliant International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup> via 800-426-7378
Chipset	AMD RS880M Chipset, SB820M south bridge	ThinkPlus™. 22 1-year LOR24 9x5 NBD
ExpressCard/34 Multicard Reader Ports	One ExpressCard/34 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port,	45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD
PCIe Mini Card	external monitor (VGA DB-15, HDMI), ethernet (RJ-45)  One PCI Express Half Mini Card slot 11b/g/n wireless <sup>4</sup> , ThinkPad 11b/g/n, PCIe Half Mini Card	45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973
Modem Bluetooth™	None None	ThinkPlus 2-year P&L P/U Depot 45K5971
Ethernet Audio support	Realtek® RTL8111DL Gigabit Network Connection High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/	ThinkPlus 3-year P&L P/U Depot 45K5972
Security Security chip	mono digital microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole None	ThinkPlus 4-year P&L P/U Depot 45K5974 Post-warranty annual maintenance
Fingerprint reader	r None <sup>2</sup> <b>1-year</b> - depot repair service / service upgrades <sup>22</sup> available	agreements at lenovo.com/thinkplus/warranty
Limited warranty"	r-year - depot repair service / service upgrades available	ienovo.com/uninkplus/warfanty

## ThinkPad® Edge 14" Accessories

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Memory  1GB PC3-8500 DDR3 Low-Halogen SODIMM  1GB PC3-8500 DDR3 L-H SODIMM (25-Pack  2GB PC3-8500 DDR3 Low-Halogen SODIMM  2GB PC3-8500 DDR3 L-H SODIMM (25-Pack  1GB PC3-10600 DDR3 L-H SODIMM (25Pack  2GB PC3-10600 DDR3 L-H SODIMM (25Pack  2GB PC3-10600 DDR3 L-H SODIMM  2GB PC3-10600 DDR3 L-H SODIMM (25Pack	) 57Y4385 ann 06/23/09 55Y3707 ann 06/23/09 ) 57Y4386 ann 06/23/09 55Y3709 ann 03/02/10 ) 55Y3710 ann 03/02/10	Batteries <sup>37</sup> ThinkPad Battery 25 (4-cell) ThinkPad Battery 25+ (6-cell) ThinkPad Battery 25++ (9-cell) ThinkPad Battery 25++ (9-cell) ThinkPad External Battery Charger <sup>44</sup> <sup>44</sup> Requires the <i>ThinkPad 90W AC Adapter</i> 40 Y7659 or the adapter provided with the More information at www.lenovo.com/allda	e system. aycomputing
Storage and removable storage USB 2.0 Portable 320GB Hard Disk USB 2.0 Portable 500GB Hard Disk USB 2.0 Portable Secure 160GB Hard Disk USB 2.0 Portable Secure 320GB Hard Disk eSATA/USB 2.0 Secure 500GB Hard Drive USB 2.0 Portable DVD Burner  ThinkPad Expansion Lenovo® Essential Notebook Stand	45K1689 ann 03/17/09 45K1690 ann 05/26/09 43R2018 ann 11/18/08 43R2019 ann 11/18/08 57Y4400 ann 01/07/10 43N3264 ann 01/05/10	ThinkPad 65W AC Adapter <sup>45</sup> <sup>45</sup> Only compatible with the integrated grap ThinkPad 90W AC Adapter Lenovo Power Hub 90W Ultraslim AC/DC Combo Adapter More info at www.lenovo.com/support/po Charging tips for 90W Ultraslim AC/DC Com •iPod and iPhone Charge Tip (L10a) •Generic Micro USB charge tip (L18)	40Y7659 ann 09/20/05 57Y4600 ann 09/07/10 41R4493 ann 09/22/09 weradapters nbo Adapter 41R4493 41R4481 ann 12/18/07 41R4490 ann 01/06/09
Lenovo® Essential Notebook Stand USB Port Replicator with Digital Video  Keyboard TrackPoint Cap Collection USB Numeric Keypad Preferred Pro USB Keyboard Enhanced Performance USB Keyboard Lenovo Mini Wireless Keyboard N590152 (blk) Ultraslim Wireless Keyboard and Mouse52 52 Wireless via 2.4GHz technology using a mi ThinkPad USB Keyboard with TrackPoint Lenovo USB Fingerprint Keyboard Lenovo USB Smartcard Keyboard	45K1610 ann 07/28/09 73P2698 ann 12/16/03 33L3225 ann 05/01/00 73P5220 ann 06/21/05 73P2620 ann 03/23/04 57Y6336 57Y4700 ann 09/15/09	More information at www.lenovopowertips  Carrying Cases ThinkPad 14W Case Sleeve Lenovo Business Messenger Case Lenovo Messenger Max Lenovo Performance BackPack ThinkPad Business Topload Case ThinkPad Business Backpack ThinkPad Deluxe Expander Case ThinkPad Executive Leather Case More information at www.lenovo.com/sup	57Y4294 ann 03/16/10 51J0475 ann 08/18/09 41U5253 ann 05/01/07 41U5254 ann 05/01/07 43R2476 ann 05/13/08 43R2482 ann 05/13/08 43R2488 ann 05/13/08 43R2480 ann 05/13/08
Mouse Lenovo Optical Mouse (USB) Lenovo Laser Mouse (USB) ThinkPad USB Laser Mouse Lenovo ScrollPoint® Mouse (USB, Optical) ThinkPad Travel Mouse (USB, Optical) ThinkPad Bluetooth Laser Mouse Lenovo Wireless Laser Mouse - Black <sup>52</sup> Lenovo Wireless Laser Mouse - Red/Black <sup>52</sup> Lenovo Optical Mouse A6010 (black) Lenovo Mini Optical Mouse M20B Lenovo Wireless Mouse N30B (black)	06P4069 ann 05/21/03 41U3074 ann 01/23/07 57Y4635 ann 12/15/09 31P7405 ann 08/27/02 31P7410 ann 06/04/02 41U5008 ann 01/22/08 45K1696 ann 11/25/08 51J0198 ann 11/25/08 57Y6255 55Y2091 55Y9360	Monitors Lenovo L2230x Wide 21.5" Monitor ThinkVision® L1711p 17" Monitor ThinkVision L1900p 19" Monitor ThinkVision L1951p Wide 19" Monitor ThinkVision L2250p Wide 22" Monitor ThinkVision L2251p Wide 22" Monitor ThinkVision L2251x Wide 22" Monitor ThinkVision L2251x Wide 23" Monitor ThinkVision L2440p Wide 24" Monitor  Monitor Accessories Lenovo USB-to-DVI Monitor Adapter	5453HB1 ann 06/10/10 5047HB2 ann 10/20/09 4431HE1 ann 11/11/08 2448HB6 ann 10/20/09 2572HB6 ann 10/20/09 2572HB6 ann 10/20/09 4014HB6 ann 06/10/10 4420HB2 ann 09/17/08
Security Kensington® MicroSaver® Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock USB Gemplus GemPC Smart Card Reader	73P2582 ann 12/29/03 45K1620 ann 09/30/08 57Y4303 ann 08/24/10 41N3040 ann 02/21/06	ThinkVision USB Soundbar ThinkVision Soundbar Kensington MicroSaver Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock Lenovo Easy Reach Monitor Stand  46 Compatible on selected Lenovo and Thir	40Y7616 ann 08/23/05 45K1263 ann 09/16/08 73P2582 ann 12/29/03 45K1620 ann 09/30/08 57Y4303 ann 08/24/10 55Y9258 ann 09/22/09
Multimedia ThinkPad In-Ear Headphones Lenovo Mini Speaker M220 Lenovo Headphone P550	57Y4488 ann 01/07/10 55Y2033 55Y2065	More information at www.lenovo.com/sup For more information on ThinkPad accessor www.lenovo.com/support/accessories www.lenovo.com/support/courity	ries, please visit:
Modem USB 2.0 Lenovo Modem	43R1814 ann 02/26/08	www.lenovo.com/support/security Other accessories at www.lenovo.com/acc Accessories Guide pdf at www.lenovo.com	





Lenovo® ThinkPad Edge 15"



Lenovo ThinkPad Edge 15" (Glossy black model)







Type-model	Proc- essor	GHz	Memory	Wide- screen display	Screen type	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Top color	Finger print reader	Blue- t		Preload	Avail date
0301-23U	i3-350M	2.26	4GB	15.6" HD	Glossy	320G 7200	Intel 6200 <sup>28</sup>			Matte black			6	Pro 64	Mar 10
<b>≈</b> 0301-25U	i3-330M	2.13	4GB	15.6" HD	Glossy	250G 5400	11b/g/n			Matte black			4	Home P	Mar 10
<b>≈</b> 0301-26U	i3-330M	2.13	2GB	15.6" HD	-	250G 5400	Intel 1000			Glossy black			6	Pro 32	Mar 10
<b>≈</b> 0301-27U	i3-330M	2.13	2GB	15.6" HD		320G 7200	Intel 1000	Gobi 2000	AT&T <sup>23</sup>	Glossy black		Blue	6	Pro 32	Mar 10
<b>≈</b> 0301-29U	i3-330M	2.13	2GB	15.6" HD	Glossy	250G 5400	Intel 1000			Glossy black			6	Home P	Mar 10
<b>≈</b> 0301-2AU	i3-330M	2.13	4GB	15.6" HD		250G 5400	Intel 1000	Gobi 2000	AT&T	Glossy black		Blue	6	Pro 64	Mar 10
<b>≈</b> 0301-2BU	i3-330M	2.13	4GB	15.6" HD		250G 5400	Intel 1000	Gobi 2000	Verizon <sup>16</sup>	Glossy black		Blue	6	Pro 64	Mar 10
<b>&gt;</b> 0301-5PU	i3-330M	2.13	2GB	15.6" HD		320G 7200	Intel 1000	Gobi 2000	Verizon	Glossy black	Finger	Blue	6	Pro 32	Mar 10
<b>≈</b> 0301-5QU	i3-330M	2.13	2GB	15.6" HD		250G 5400	Intel 1000			Glossy red		Blue	6	Pro 32	Mar 10
	i3-330M	2.13	3GB	15.6" HD		320G 7200	Intel 1000			Glossy red		Blue	6	Home P	Mar 10
<b>≈</b> 0301-5SU	i3-330M	2.13	4GB	15.6" HD		320G 7200	Intel 1000			Glossy black	Finger	Blue	6	Pro 64	Mar 10

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   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Core™ i3 processor i3-330M or i3-350M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7 Home Premium 64 - Some: Genuine Windows 7
Memory	2GB, 3GB, or 4GB std / 8GB max <sup>7</sup> / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Professional 32 - Some: Genuine Windows 7 Professional 64 Preloaded applications <sup>14</sup> (only some
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in <b>250GB</b> <sup>8</sup> (5400 rpm) or <b>320GB</b> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	listed)  ■ Rescue and Recovery <sup>™</sup> ■ Access Connections <sup>™</sup> ■ Password Manager
Widescreen display	Some: 15.6" (395mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 15.6" (395mm) HD (1366x768) color, VibrantView (glossy), LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	<ul> <li>ThinkVantage Power Manager</li> <li>ThinkVantage System Update</li> <li>ThinkVantage Toolbox</li> <li>Lenovo Online Data Backup</li> <li>Norton™ Internet Security 2011</li> </ul>
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display;  Max external resolution: 2048x1536@75Hz; 1920x1080 (HDMI port)	<ul> <li>(30 days of virus definitions)</li> <li>Adobe® Reader®</li> <li>Adobe Flash® Player</li> <li>Skype™ for Windows</li> <li>Microsoft Office 2010 preloaded; purchase product key to activate</li> </ul>
Keyboard TrackPoint® Touch pad ThinkLight™	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³ UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch None	Microsoft Research AutoCollage Touch
Dimensions <sup>3</sup>	15.6W" (WxDxH): 14.96" x 9.72" x 1.27-1.48"; 380 x 247mm x 32.3-37.5mm	
Weight <sup>2</sup> Case color	4-cell: from 5.32 lb (2.42kg); 6-cell: from 5.50 lb (2.50kg); 9-cell: from 5.89 lb (2.67kg) Matte black (top), glossy black (top), or glossy red (top),	Supports ThinkVantage® technologies
Case material	trimmed with a thin silver band (side); black bottom	65-watt AC adapter
Battery - type37	Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 4-cell or 6-cell	EPEAT™ Gold rating
Battery - life <sup>10</sup>	4-cell: up to 2.9 hr; 6-cell: up to 4.5 hr	ENERGY STAR® 5.0-compliant   RoHS-compliant
Chipset ExpressCard/34	Mobile Intel HM55 Express Chipset One ExpressCard/34	International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support
Multicard Reader Ports	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	during the warranty period <sup>12</sup> via 800-426-7378
PCle Mini Card 11b/g/n	Two PCI Express Mini Card slots  Some: 11b/g/n wireless <sup>4</sup> , ThinkPad 11b/g/n, PCIe Half Mini Card	ThinkPlus™. 22 1-year LOR24 9x5 NBD
Intel 1000	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2	45K5968 ThinkPlus 2-year LOR 9x5 NBD
Intel 6200 <sup>28</sup> Gobi™ 2000	Some: 11a/b/g/n wireless, PCle Half Mini Card, Intel Centrino Advanced-N 6200, 2x2 Some: Wireless WAN, Qualcomm chipset, PCle Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider	45K5969 ThinkPlus 3-year LOR 9x5 NBD
Carrier	Some: AT&T® or Verizon®, contract required with service provider	45K5970 ThinkPlus 4-year LOR 9x5 NBD
Modem Bluetooth™ Ethernet	None Some: Bluetooth 2.1 wireless Realtek® RTL8111DL Gigabit Network Connection	45K5973 ThinkPlus 2-year P&L P/U Depot 45K5971
Intel AMT Audio support	None High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/	ThinkPlus 3-year P&L P/U Depot 45K5972
Security	mono digital microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole	ThinkPlus 4-year P&L P/U Depot
Security chip	None	45K5974 Post-warranty annual maintenance
	r <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor  2 <b>1-year</b> - depot repair service / service upgrades <sup>22</sup> available	agreements at lenovo.com/thinkplus/warranty
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				Max		Wide-		Disk		PCle		PCle			-	Finger		Bat-				
]	Type-model	Process	or GHz	turbo (GHz)	Memory	screen display	Screen type	SATA GB <sup>®</sup> rp		Mini Ca 802.11			Carrier	Тор со	lor I	print reader	Blue- tooth	tery	Prelo	ad		vail late
	0301-28U ( 0301-5NU ( 0301-8GU i 0301-8HU i 0301-8HU i 0301-9AU i 0301-9AU i 0301-9CU i 0301-9DU i 0301-8AU i 0301-8AU i	Cel P45 i3-330M i3-330M i3-330M i3-330M i3-350M i3-350M i5-430M i3-350M	00 1.86 2.13 2.13 2.13 2.13 2.13 2.26 2.26 2.26 2.26	2.53	2GBx1 2GBx2 2GBx1 2GBx2 2GBx1 2GBx1 2GBx1 2GBx2 2GBx2 2GBx2	15.6" HD 15.6" HD	Glossy	250G 54 250G 54 320G 72 250G 54 320G 72 250G 54 320G 72 500G 72	400 400 200 400 200 400 200 200 200 400	Intel 10 WiMAX Intel 10 Intel 10 Intel 10 Intel 10 Intel 10 Intel 10	000 000 000 000 000 000 000	Gobi	AT&T <sup>23</sup>	Glossy I Matte bl Matte bl Matte bl Matte bl Glossy I Matte bl Glossy I Matte bl Glossy I Matte bl Glossy I	ack ack ack ack olack ack olack olack olack	Fing	Blue Blue Blue Blue	6 H 6 H 6 H 6 H 6 H 4 H	Home F Pro 64 Pro 32 Pro 64 Pro 64	9 64 A	Apr Apr Apr Apr Apr Apr Apr Apr May	10 10 10 10 10 10 10 10 10 10 10
						lium busii licrosoft®								er™ Prog	ram							
	Positioning Processor		Intel® C DMI (Di and 2MI Intel Co DMI (Di Hyper-T Intel Co DMI (Di	eleron rect Me B cach ore™ i3 rect Me Threadi ore i5 p	Procesedia Interese or sedia Interesedia Interesedi	h quality, d ssor P450 face), inte sor i3-330 face), inte ology; 3M or i5-430M face), inte r-Threadii	of with or i3 grated B cache with digrated	dual-core DDR3 m -350M w DDR3 m or ual-core DDR3 m	e, emo ith d emo , emo	ry conti ual-cor ry conti ry conti	oller e, oller	(up to	1066M 1066M	IHz), IHz),	- 3 - 3 - 3	Some: Some: Some: Sloade ed)	Genu Home Genu Profe Genu Profe ed app	ine Prine ssic ine ssic	ing sys Window emium Window onal 32 Window onal 64 ations	vs® 7 64 vs 7 vs 7		me
į	Memory		2GB or	<b>4GB</b> s	td / 8GB	max <sup>7</sup> /PC wo 204-pi	3-8500	1066MH	z <b>D</b> [	DR3, no		rity,			• A	ccess	e and l s Conr ord Ma	ecti		l		
	SATA DVD± SATA disk	-RW	DVD bu <b>250GB</b> <sup>®</sup> SATA 3.	rner, S (5400 0Gb/s,	ATA 1.50 rpm), <b>32</b>	ab/s, 12.7r 2 <b>0GB</b> (720 e, 9.5mm	mm high 0 rpm),	n, fixed, r or <b>500G</b>	not re	emovab '200 rpr	n) /	ay-in			• T • T • N	hinkV hinkV hinkV lorton	antage antage antage ™ Inte	e Po e Sy e To rnet	ower Maystem U olbox t Secur	Ipdate ity 20	е	
	Nidescreen display Camera	,	Some:	LED b 15.6" ( LED b	acklight (395mm) acklight	HD (1366 , 220 nits, HD (1366 , 220 nits, en, 2.0-me	16:9 as <b>x768) (</b> 16:9 as	pect ration pect r	o, 50 <b>bran</b> o, 50	0:1 cor 1 <b>tView</b> (	glos	sy),			<ul> <li>(30 days of virus definitions)</li> <li>Adobe® Reader®</li> <li>Adobe Flash® Player</li> <li>Skype™ for Windows</li> <li>Microsoft Office 2010 preloaded; purchase product key to activate</li> </ul>							
į	ntegrated graphics		external digital m support	analog nonitor s dual	g monitor support independ	rocessor, r support v via HDMI <sup>T</sup> lent displa r: 2048x15	<sup>M</sup> (supp ເy;	orting HI	DCP	to outp	ut pr		d conte	nt);	• N				rch Aut			
	Keyboard FrackPoint® Fouch pad FhinkLight™	,	TrackPo UltraNa	int® poi v™,	inting dev	ultimedia vice, Interi eyboard,	net Scro	oll Bar <sup>13</sup>	i-tou	ch												
i	Dimensions Neight <sup>2</sup>	3	15.6W"	(WxDx	(H): 14.96	6" x 9.72"  2kg); <i>6-c</i>	x 1.27-	1.48"; 38	0 x 2	247mm	x 32.	3-37.	5mm 5 80 lb	(2.67kg)	1 '	oports	Think	Var	ntage® t	echno	olog	ies
(   	Case color Case mater Battery - typ Battery - life	rial . pe <sup>37</sup>	Matte bl black bo Acryloni Lithium <i>4-cell:</i> u	ack (to ttom trile-Bu lon <b>4-c</b> p to 2.9	p) or glo utadiene- cell or 6-ce 9 hr; <i>6-ce</i>	ssy black Styrene ( <i>p</i> cell cell: up to 4	(top), tri ABS) pl .5 hr	mmed w	vith a	thin sil	ver b	and (s	3.09 lb side);	(2.07 kg)	EP ( EN ( Ro	EAT™ excep ERGY excep HS-co	STAF t Cele mpliar	ratir ron R® 5 ron nt	ng models 5.0-com models	pliant )		
   	Chipset ExpressCar Multicard Re Ports	rd/34 eader	One Exp 7-in-1 re Three U external	oressC eader ( SB 2.0 monite	ard/34 MMC, Me (one po or (VGA	wered), or DB-15, H	ck, Mem ne USB DMI), et	2.0/eSA	TA c	ombo p		D, XD	Type H	)	24	hour x luring	c7 day	/ <sup>18</sup> to arra	anty Se oll-free nty per 8	supp		
	PCIe Mini C Intel 1000 WiMAX	0	Some: Some:	11b/g/ 11a/b/	n wireles g/n and V	Card slots s <sup>4</sup> , PCIe H ViMAX wii dvanced-	lalf Min reless, f	Cle Hal	f Mir	ni Card,				, 1x2				,	ar LOF OR 9x	45K 5 NBI	(596 )	8
	Gobi™ 20	000	Some:	Wirele	ss WAN,	Qualcomi A/HSPA, G	m chips	et, PCIe	Mini	Card, I	EV-D	O Rev	/. Α,		Thi	nkPlu	s 3-ye	ar L	OR 9x	45K 5 NBI 45K	)	
	Carrier Modem		<i>Some:</i> None	AT&T®	, contrac	t required						•			Thi	nkPlu	s 4-ye	ar L	OR 9x		)	
- 1	Bluetooth™ Ethernet ntel AMT		Realtek		oth 2.1 w 3111DL G	rireless Bigabit Ne	twork C	onnectio	n								•		P&L P/L	J Dep 45K	ot (597	
	Audio suppo Security Security chi	ort ip	mono di Power-c None	gital m on pass	icrophon word, ha	dio, Realt e, combo rd disk pa	audio/n ssword	nic jack , supervi	sor p	oasswo		-			Thi	nkPlu	s 4-ye	ar F	P&L P/l P&L P/l ual mai	45K Dep 45K	(597 ot (597	'4
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Type-model	Processor	GHz	Max turbo (GHz)	Memory	Wide- screen / display	Screen type	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	PCIe Mini Card WWAN	Carrier		Finger print reader	Blue-				/ail ate
0301-DBU	i3-370M	2.40		2GB	15.6" HD		250G 5400	Intel 1000			Matte black			6	Pro 64	Jul	10
0301-DCU	i3-370M	2.40		4GB	15.6" HD		320G 7200	Intel 1000			Matte black	Fing	Blue	6	Pro 64	Jul	10
0301-DDU	i3-370M	2.40		4GB	15.6" HD		320G 7200	Intel 1000	Gobi 2000	AT&T <sup>23</sup>	Matte black	Fing	Blue	6	Pro 64	Jul	10
< 0301-DEU	i3-370M	2.40		4GB	15.6" HD		320G 7200	Intel 1000			Glossy red	Fing	Blue	6	Pro 64	Jul	10
0301-ECU	i3-370M	2.40		4GB	15.6" HD	Glossy	250G 5400	Intel 1000			Matte black	Ŭ		4	Home P	Jul	10
0301-EDU	i3-370M	2.40		4GB	15.6" HD		500G 7200	Intel 1000			Glossy black	Fing	Blue	6	Pro 64	Jul	10
0301-EEU	i3-350M	2.26		4GB	15.6" HD		500G 7200	Intel 1000			Glossy black	Fing	Blue	6	Pro 64	Jul	10
0301-EFU	i3-370M	2.40		2GB	15.6" HD		250G 5400	Intel 1000			Glossy black	(		6	Home P	Jul	10
0301-EGU	i3-370M	2.40		3GB	15.6" HD		320G 7200	Intel 1000			Glossy red		Blue	6	Home P	Jul	10
0301-EHU	i5-450M	2.40	2.66	4GB	15.6" HD		500G 5400	Intel 1000			Glossy black	Fing	Blue	6	Pro 64	Jul	10
0301-EJU	i5-450M	2.40	2.66	4GB	15.6" HD		500G 7200	Intel 1000			Glossy black	Fing	Blue	6	Pro 64	Jul	10
0301-EMU	i3-350M	2.26		2GB	15.6" HD		250G 5400	Intel 1000	Gobi 2000	AT&T	Glossy black	(		6	Pro 32	Jul	10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

	These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)	
Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Core™ i3 processor i3-350M or i3-370M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache or Intel Core i5 processor i5-450M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7 Home Premium 64 - Some: Genuine Windows 7 Professional 32 - Some: Genuine Windows 7 Professional 64
Memory	2GB, 3GB, or 4GB std / 8GB max <sup>7</sup> / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; ltalics: standard memory in both sockets; no sockets available; Non-italics: standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed)  • Rescue and Recovery™  • Access Connections™
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in <b>250GB</b> <sup>8</sup> (5400 rpm), <b>320GB</b> (7200 rpm), or <b>500GB</b> (5400 or 7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	<ul> <li>Password Manager</li> <li>ThinkVantage Power Manager</li> <li>ThinkVantage System Update</li> <li>ThinkVantage Toolbox</li> </ul>
Widescreen display Camera	Some: 15.6" (395mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 15.6" (395mm) HD (1366x768) color, VibrantView (glossy), LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	<ul> <li>Norton™ Internet Security 2011 (30 days of virus definitions)</li> <li>Adobe® Reader®</li> <li>Adobe Flash® Player</li> <li>Skype™ for Windows</li> <li>Microsoft Office 2010 preloaded;</li> </ul>
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display;  Max external resolution: 2048x1536@75Hz; 1920x1080 (HDMI port)	Microsoft Research AutoCollage     Touch
Keyboard TrackPoint® Touch pad ThinkLight™	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³ UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch None	
Dimensions <sup>3</sup>	<i>15.6W" (WxDxH):</i> 14.96" x 9.72" x 1.27-1.48"; 380 x 247mm x 32.3-37.5mm	Supports ThinkVantage® technologies
Weight <sup>2</sup> Case color  Case material Battery - type <sup>37</sup> Battery - life <sup>10</sup>	4-cell: from 5.32 lb (2.42kg); 6-cell: from 5.50 lb (2.50kg); 9-cell: from 5.89 lb (2.67kg) Matte black (top), glossy black (top), or glossy red (top), trimmed with a thin silver band (side); black bottom Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 4-cell or 6-cell 4-cell: up to 2.9 hr; 6-cell: up to 4.5 hr	65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹7 24 hour x 7 day¹8 toll-free support
Chipset ExpressCard/34 Multicard Reader Ports	Mobile Intel HM55 Express Chipset One ExpressCard/34 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	during the warranty period <sup>12</sup> via 800-426-7378  ThinkPlus <sup>TM, 22</sup> 1-year LOR <sup>24</sup> 9x5 NBD
PCIe Mini Card Intel 1000 Gobi™ 2000	Two PCI Express Mini Card slots 11b/g/n wireless <sup>4</sup> , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 Some: Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider	45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD
Carrier Modem	Some: AT&T®, contract required with service provider None	45K5970 ThinkPlus 4-year LOR 9x5 NBD
Bluetooth™ Ethernet Intel AMT	Rone: Bluetooth 2.1 wireless Realtek® RTL8111DL Gigabit Network Connection None	45K5973 ThinkPlus 2-year P&L P/U Depot 45K5971
Audio support	High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/mono digital microphone, combo audio/mic jack	ThinkPlus 3-year P&L P/U Depot 45K5972
Security Security chip	Power-on password, hard disk password, supervisor password, security keyhole None	ThinkPlus 4-year P&L P/U Depot 45K5974 Post-warranty annual maintenance
	r Some: UPEK Fingerprint reader on palm rest, swipe sensor	agreements at
Limited warranty	<sup>2</sup> 1-year - depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty

Type-model	Processor	GHz	Max turbo (GHz)	Memory	Wide- screen display	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11		Carrier	Top color	Finger print reader			Preload	Avail date
0301-JDU	i5-480M	2.66	2.93	4GB	15.6" HD	320G 7200	Intel 1000	None	None	Matte black	Fing	Blue	6	Pro 64	Jan 11
0301-JAU	i3-390M	2.66		4GB	15.6" HD	320G 7200	Intel 1000	None	None	Matte black	Fing	Blue	6	Pro 64	Jan 11
0301-J9U	i3-390M	2.66		2GB	15.6" HD	250G 5400	Intel 1000	None	None	Matte black			6	Pro 64	Jan 11
0301-K3U	i3-390M	2.66		4GB	15.6" HD	500G 5400	Intel 1000	None	None	Matte black			6	Home P	Jan 11
0301-Q2U	i3-380M	2.53		2GB	15.6" HD	250G 5400	11b/g/n	None	None	Matte black			6	Pro 64	Jan 11

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Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Core™ i3 processor i3-380M or i3-390M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache or Intel Core i5 processor i5-480M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7 Home Premium 64 - Some: Genuine Windows 7 Professional 64  Preloaded applications¹4 (only some listed)
Memory	<b>2GB</b> or <b>4GB</b> std / 8GB max <sup>7</sup> / PC3-8500 1066MHz <b>DDR3</b> , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; standard memory in one socket; one socket available	Rescue and Recovery™     Access Connections™     Password Manager     ThinkVantage Power Manager
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in <b>250GB</b> <sup>8</sup> (5400 rpm), <b>320GB</b> (7200 rpm), or <b>500GB</b> (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	<ul> <li>ThinkVantage System Update</li> <li>ThinkVantage Toolbox</li> <li>Norton™ Internet Security 2011 (30 days of virus definitions)</li> <li>Adobe® Reader®</li> </ul>
Widescreen display Camera	15.6" (395mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	<ul> <li>Adobe Flader</li> <li>Adobe Flash® Player</li> <li>Skype™ for Windows</li> <li>Microsoft Office 2010 preloaded;</li> </ul>
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; Max external resolution: 2048x1536@75Hz; 1920x1080 (HDMI port)	purchase product key to activate  Microsoft Research AutoCollage Touch
Keyboard TrackPoint® Touch pad	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³ UltraNav™,	Cupporte Think/(antege® technologies
ThinkLight™	wide touch pad below keyboard, Tap Zones, multi-touch None	Supports ThinkVantage® technologies
Dimensions <sup>3</sup> Weight <sup>2</sup> Case color Case material Battery - type <sup>37</sup> Battery - life <sup>10</sup>	15.6W" (WxDxH): 14.96" x 9.72" x 1.27-1.48"; 380 x 247mm x 32.3-37.5mm 4-cell: from 5.32 lb (2.42kg); 6-cell: from 5.50 lb (2.50kg); 9-cell: from 5.89 lb (2.67kg) Matte black (top), trimmed with a thin silver band (side); black bottom Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium lon 6-cell 4-cell: up to 2.9 hr; 6-cell: up to 4.5 hr	65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹7 24 hour x 7 day¹8 toll-free support during the warranty period¹2
	Mobile Intel HM55 Express Chipset One ExpressCard/34 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)	via 800-426-7378  ThinkPlus™. <sup>22</sup> 1-year LOR <sup>24</sup> 9x5 NBD
Ports PCle Mini Card	Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)  Two PCI Express Mini Card slots	45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969
11b/g/n Intel 1000 WWAN upg	Some: 11b/g/n wireless <sup>4</sup> , ThinkPad 11b/g/n, PCIe Half Mini Card Some: 11b/g/n wireless <sup>4</sup> , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 None	ThinkPlus 3-year LOR 9x5 NBD 45K5970
Modem Bluetooth™	None Some: Bluetooth 2.1 wireless	ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 2-year P&L P/U Depot
Ethernet Intel AMT Audio support	Realtek® RTL8111DL Gigabit Network Connection None High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/	45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972
Security Security chip	mono digital microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole None	ThinkPlus 4-year P&L P/U Depot 45K5974
Fingerprint reade	r Some: UPEK Fingerprint reader on palm rest, swipe sensor	Post-warranty annual maintenance agreements at
	<sup>2</sup> 1-year - depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Screen type	Camera	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card 802.11	Top color	Finger print reader	Blue- tooth	Bat- tery cells	Preload	Avail date
0302-44U	P340	2.20	2GB	15.6" HD		2.0M	320G 7200	11b/g/n	Matte black	None	None	6	Pro 64	Sep 10
0302-45U	P540	2.40	2GB	15.6" HD		2.0M	320G 7200	11b/g/n	Matte black	None	None	6	Pro 64	Sep 10
r 0302-4LU	P840	1.90	4GB	15.6" HD	Glossy	0.3M	500G 5400	11b/g/n	Glossy black	None	None	6	Home P	Jan 11

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Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles AMD® Athlon™ II Dual-Core Mobile Processor P340 with dual-core, virtualization technology, integrated DDR3 memory controller, and 1MB L2 cache or AMD Turion™ II Dual-Core Mobile Processor P540 with dual-core, virtualization technology, integrated DDR3 memory controller, and 2MB L2 cache or AMD Phenom™ II Triple-Core Mobile Processor P840 with triple-core, virtualization technology, integrated DDR3 memory controller, and 1.5MB L2 cache 2GB or 4GB std / 8GB max <sup>7</sup> / PC3-8500 1066MHz DDR3, non-parity.	Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7 Home Premium 64 - Some: Genuine Windows 7 Professional 64  Preloaded applications¹⁴ (only some listed)
	dual-channel capable, two 204-pin SO-DIMM sockets;  Non-italics: standard memory in one socket; one socket available	<ul> <li>Rescue and Recovery<sup>™</sup></li> <li>Access Connections<sup>™</sup></li> <li>Password Manager</li> </ul>
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in <b>320GB</b> <sup>8</sup> (7200 rpm) or <b>500GB</b> (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	<ul> <li>ThinkVantage Power Manager</li> <li>ThinkVantage System Update</li> <li>ThinkVantage Toolbox</li> <li>Adobe® Reader®</li> </ul>
Widescreen display Camera	Some: 15.6" (395mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 15.6" (395mm) HD (1366x768) color, VibrantView (glossy), LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 0.3-megapixel or 2.0-megapixel, fixed focus	<ul> <li>Adobe Flash® Player</li> <li>Skype™ for Windows</li> <li>Microsoft Office 2010 preloaded; purchase product key to activate</li> <li>Microsoft Research AutoCollage Touch</li> </ul>
Integrated graphics	ATI™ Radeon™ HD 4250 graphics, in RS880M, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; Max external resolution: 2456x1536@60Hz	Touch
Keyboard TrackPoint® Touch pad	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³ UltraNav™,	Supports ThinkVantage® technologies
ThinkLight™	wide touch pad below keyboard, Tap Zones, multi-touch None	65-watt AC adapter EPEAT™ Gold rating
Dimensions <sup>3</sup> Weight <sup>2</sup> Case color  Case material Battery - type <sup>37</sup>	15.6W" (WxDxH): 14.96" x 9.72" x 1.27-1.48"; 380 x 247mm x 32.3-37.5mm 4-cell: from 5.40 lb (2.45kg); 6-cell: from 5.58 lb (2.53kg); 9-cell: from 5.95 lb (2.70kg) Matte black (top) or glossy black (top), trimmed with a thin silver band (side); black bottom Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell	ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup> via 800-426-7378
Battery - life <sup>10</sup> Chipset	4-cell: up to 2.6 hr; 6-cell: up to 4 hr; 9-cell: up to 6 hr  AMD RS880M Chipset, SB820M south bridge	ThinkPlus™. 22 1-year LOR24 9x5 NBD
ExpressCard/34 Multicard Reader Ports	One ExpressCard/34 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD
PCIe Mini Card 11b/g/n	One PCI Express Half Mini Card slot 11b/g/n wireless⁴, ThinkPad 11b/g/n, PCIe Half Mini Card	45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973
Modem Bluetooth™ Ethernet	None None Realtek® RTL8111DL Gigabit Network Connection	ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot
Audio support Security	High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/mono digital microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole	45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974
Security chip Fingerprint reader	None r None r None	Post-warranty annual maintenance agreements at
Limited warranty <sup>12</sup>	<sup>2</sup> <b>1-year</b> - depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty

See footnotes for important warranty information

US model announced January 11, 2011; previous models on September 28, 2010

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(LDN1-6) January 2011

## ThinkPad® Edge 15" Accessories

) 57Y4385 ann 06/23/09 55Y3707 ann 06/23/09 ) 57Y4386 ann 06/23/09 55Y3709 ann 03/02/10 (c) 55Y3710 ann 03/02/10	Batteries <sup>37</sup> ThinkPad Battery 25 (4-cell) ThinkPad Battery 25+ (6-cell) ThinkPad Battery 25++ (9-cell) ThinkPad Battery 25++ (9-cell) ThinkPad External Battery Charger <sup>44</sup> 44 Requires the <i>ThinkPad 90W AC Adapter</i> 40 Y7659 or the adapter provided with the More information at www.lenovo.com/allda	system. aycomputing
45K1689 ann 03/17/09 45K1690 ann 05/26/09 43R2018 ann 11/18/08 43R2019 ann 11/18/08 57Y4400 ann 01/07/10 43N3264 ann 01/05/10	45 Only compatible with the integrated graph ThinkPad 90W AC Adapter Lenovo Power Hub 90W Ultraslim AC/DC Combo Adapter More info at www.lenovo.com/support/por/Charging tips for 90W Ultraslim AC/DC Com  •iPod and iPhone Charge Tip (L10a)	40Y7659 ann 09/20/05 57Y4600 ann 09/07/10 41R4493 ann 09/22/09 weradapters nbo Adapter 41R4493 41R4481 ann 12/18/07
45J9292 ann 05/12/09 45K1610 ann 07/28/09	More information at www.lenovopowertips	41R4490 <i>ann 01/06/09</i> s.com
73P2698 ann 12/16/03 33I.3225 ann 05/01/00 73P5220 ann 06/21/05 73P2620 ann 03/23/04 57Y6336 57Y4700 ann 09/15/09 cro-size USB receiver. 55Y9003 ann 08/18/09 73P4730 ann 02/22/05 51J0155 ann 03/24/09	Carrying Cases ThinkPad 15W Case Sleeve Lenovo Business Messenger Case Lenovo Messenger Max Lenovo Performance BackPack ThinkPad Business Topload Case ThinkPad Business Backpack ThinkPad Deluxe Expander Case ThinkPad Executive Leather Case More information at www.lenovo.com/supp	51J0477 ann 08/18/09 51J0475 ann 08/18/09 41U5253 ann 05/01/07 41U5254 ann 05/01/07 43R2476 ann 05/13/08 43R2482 ann 05/13/08 43R2480 ann 05/13/08 port/cases
06P4069 ann 05/21/03 41U3074 ann 01/23/07 57Y4635 ann 12/15/09 31P7405 ann 08/27/02 31P7410 ann 06/04/02 41U5008 ann 01/22/08 45K1696 ann 11/25/08 51J0198 ann 11/25/08 57Y6255 55Y2091 55Y9360	Lenovo L2230x Wide 21.5" Monitor ThinkVision® L1711p 17" Monitor ThinkVision L190p 19" Monitor ThinkVision L1951p Wide 19" Monitor ThinkVision L2250p Wide 22" Monitor ThinkVision L2251p Wide 22" Monitor ThinkVision L2251x Wide 22" Monitor ThinkVision L2321x Wide 23" Monitor ThinkVision L2440p Wide 24" Monitor  Monitor Accessories46	5453HB1 ann 06/10/10 5047HB2 ann 10/20/09 4431HE1 ann 11/11/08 2448HB6 ann 10/20/09 2572HB6 ann 10/20/09 2578HB6 ann 10/20/09 4014HB6 ann 06/10/10 4420HB2 ann 09/17/08
73P2582 ann 12/29/03 45K1620 ann 09/30/08 57Y4303 ann 08/24/10 41N3040 ann 02/21/06	ThinkVision USB Soundbar ThinkVision Soundbar Kensington MicroSaver Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock Lenovo Easy Reach Monitor Stand  46 Compatible on selected Lenovo and Thir	40Y7616 ann 08/23/05 45K1263 ann 09/16/08 73P2582 ann 12/29/03 45K1620 ann 09/30/08 57Y4303 ann 08/24/10 55Y9258 ann 09/22/09
57Y4488 ann 01/07/10 55Y2033 55Y2065	More information at www.lenovo.com/supp For more information on ThinkPad accessor www.lenovo.com/support/accessories	port/monitoraccessories ries, please visit:
43R1814 ann 02/26/08	www.lenovo.com/support/security Other accessories at www.lenovo.com/acc	cessories
		<b>3</b> -
	\$\cdot 55Y4415 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	55Y3706 ann 06/23/09   57Y4385 ann 06/23/09   57Y4386 ann 06/23/09   55Y3707 ann 06/23/09   55Y3707 ann 06/23/09   55Y3707 ann 06/23/09   55Y3710 ann 03/02/10   55Y4415 ann 03/02/10   55Y4416 ann 05/26/09   43R2018 ann 11/18/08   57Y4400 ann 01/07/10   43N3264 ann 01/05/10   45J9292 ann 05/12/09   45K1610 ann 07/28/09   45K1610 ann 07/28/09   45K1610 ann 06/21/03   57Y46336   57Y4700 ann 06/21/05   57Y26336   57Y4700 ann 08/18/09   57Y4635 ann 03/24/09   57Y4635 ann 12/15/09   31P7410 ann 06/04/02   41U5008 ann 01/22/08   45K1690 ann 03/24/09   55Y2091   55Y2091   55Y2033   55Y2065   42R1114 ann 06/04/02   41R113040 ann 02/21/06   57Y4488 ann 01/07/10   55Y2033   55Y2065   42R1114 ann 06/06/08   43R1114 ann 06/06/08   43R1114 ann 06/06/08   43R1114 ann 06/04/02   43R1114 ann 06/06/08   43R114 ann 06/04/02   43R1114 ann 06/04/02   43R114 a





Lenovo® ThinkPad SL410



Lenovo ThinkPad SL410



Lenovo ThinkPad SL410



Lenovo ThinkPad SL410



Lenovo ThinkPad SL410 buttons



Lenovo ThinkPad SL410 lights

	Type-model	Proc- essor	GHz I	Memory	Wide- screen display	or	Screen	Cam-	Integrat graphic	Disk ed SATA es GB <sup>®</sup> rpm	SATA optical	Mini PCle 802.11 wireless	Mini PCle WWAN	Blue-	Finger print reader	terv		Avail date
*	2842-F7U	T6570	2.10	2GB	14.0" HD	LED	Glossy	2.0M	GMA	250G 5400	DVD±RW	* Intel 1000	None			6	Pro 32	Jan 10
≫<	2842-F8U	T6570	2.10	3GB	14.0" HD	LED	Glossy	2.0M	GMA	320G 7200	DVD±RW	* Intel 1000	None			6	Pro 32	Jan 10
≫<	2842-F9U	T6670	2.20	4GB	14.0" HD	LED	Glossy	2.0M	GMA	320G 7200	DVD±RW	<b>★ Intel 1000</b>	None	Blue	Fing	6	Pro 64	Jan 10
133	2842-K3U	T6670	2.20	2GB	14.0" HD	LED	Glossy	0.3M	GMA	250G 5400	DVD±RW	* Intel 1000	None			6	Pro 64	Sep 10
132	2842-K4U	T6670	2.20	3GB	14.0" HD	LED	Glossy	0.3M	GMA	500G 7200	DVD±RW	* Intel 1000	None			6	Pro 64	Sep 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Processor	Intel® Core™ 2 Duo processor T6570 or T6670 with dual-core, 800MHz system bus, and 2MB L2 cache	Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7
Memory	2GB, 3GB, or 4GB std / 8GB max <sup>7</sup> / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Professional 32 - Some: Genuine Windows 7 Professional 64 Preloaded applications 14 (only some
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in <b>250GB</b> <sup>8</sup> (5400 rpm), <b>320GB</b> (7200 rpm), or <b>500GB</b> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™	listed)  • Rescue and Recovery <sup>™</sup> • Access Connections <sup>™</sup> • Password Manager
Widescreen display Camera	14.0" (355mm) HD (1366x768) color, VibrantView (glossy), LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 0.3-megapixel or 2.0-megapixel, fixed focus	ThinkVantage Power Manager ThinkVantage System Update Fingerprint Software (fingerprint models)
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, HDMI port supporting HDCP to output protected content; Max external resolution: 2048x1536@75Hz (VGA DB-15 port); 1920x1080 (HDMI port)	ThinkVántage Toolbox Microsoft Office 2010 preloaded; purchase product key to activate
Keyboard TrackPoint® Touch pad	6-row, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch	Adobe® Reader®     Adobe Flash® Player     Roxio® Creator® Business Edition (DVD±RW)
Lighting FX	Illuminated power button	Supports ThinkVantage® technologies
Dimensions <sup>3</sup> Weight <sup>2</sup> Case color Case material Battery - type <sup>37</sup> Battery - life <sup>10</sup>	4/6-cell 14.0W" (WxDxH): 13.54" x 9.17" x 1.26–1.42"; 344mm x 233mm x 32–36mm 4-cell: starting at 4.59 lb (2.08kg); 6-cell: starting at 5.1 lb (2.3kg) ThinkPad Matte Black Scratch-resistant ABS plastic Lithium Ion 6-cell 6-cell: up to 4.0 hr; 9-cell: up to 6 hr	65-watt (GMA graphics) AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹7 - 24 hour x 7 day¹8 toll-free support
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, ethernet MAC), LPC bus (IT8752)	during the warranty period <sup>12</sup> via 800-426-7378
ExpressCard Multicard Reader PC Card Smart Card Read	One slot (ExpressCard/34) 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) None	ThinkPlus <sup>TM.22</sup> 1-year LOR <sup>24</sup> 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969
Ports	Three USB 2.0, one eSATA/USB combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD
Intel 1000 WWAN upg	One Mini PCI Express slot 11b/g/n wireless <sup>4</sup> , Mini PCIe adapter, Intel Centrino® Wireless-N 1000, 1x2 None	ThinkPlus 4-year LOR 9x5 NBD  ThinkPlus 5-year LOR 9x5 NBD  45K5975
Modem Bluetooth™ Ethernet	None Some: Bluetooth 2.1 wireless, LED indicator Realtek RTL8111DL Gigabit Network Connection, PHY, PCIe x1	ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot
Intel AMT Audio support	None High Definition (HD) Audio, ALC269Q codec / stereo speakers, 1.5 watt / speaker volume up, down and mute buttons /	ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974
Security Security chip	mono microphone, mic mute button, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole None	ThinkPlus 5-year P&L P/U Depot 45K5976
	Some: Fingerprint reader on palm rest, swipe sensor	Post-warranty annual maintenance agreements at
Limited warranty <sup>12</sup>	1-year - depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty

See footnotes for important warranty information ★ Intel Centrino® processor technology

Substitute: US models announced September 28, 2010; previous models on December 15, 2009

Substitute: US models withdrawn effective December 2010 or January 2011

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## ThinkPad® SL410 Accessories

Memory 1GB PC3-8500 DDR3 Low-Halogen SODIMM 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack 2GB PC3-8500 DDR3 Low-Halogen SODIMM 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack 4GB PC3-8500 DDR3 Low-Halogen SODIMM	) 57Y4385 ann 06/23/09 55Y3707 ann 06/23/09 ) 57Y4386 ann 06/23/09	Batteries <sup>37</sup> ThinkPad Battery 25 (4-cell) ThinkPad Battery 25+ (6-cell) ThinkPad Battery 25++ (9-cell) ThinkPad External Battery Charger <sup>44</sup> <sup>44</sup> Requires the <i>ThinkPad 90W AC Adapte</i> , 40Y7659 or the adapter provided with the	
Storage and removable storage SL410/510 500GB Disk SATA 3G/s (5400 rpm	) 43N3422 ann 10/22/09	More information at www.lenovo.com/allda	,
USB 2.0 Portable 320GB Hard Disk USB 2.0 Portable 500GB Hard Disk USB 2.0 Portable Secure 160GB Hard Disk USB 2.0 Portable Secure 320GB Hard Disk eSATA/USB 2.0 Secure 500GB Hard Drive USB 2.0 Portable DVD Burner	45K1689 ann 03/17/09 45K1690 ann 05/26/09 43R2018 ann 11/18/08 43R2019 ann 11/18/08 57Y4400 ann 01/07/10 43N3264 ann 01/05/10	ThinkPad 65W AC Adapter <sup>45</sup> 45 Only compatible with the integrated graph ThinkPad 90W AC Adapter Lenovo Power Hub 90W Ultraslim AC/DC Combo Adapter More info at www.lenovo.com/support/port	40Y7659 ann 09/20/05 57Y4600 ann 09/07/10 41R4493 ann 09/22/09
ThinkPad Expansion Lenovo® Essential Notebook Stand USB Port Replicator with Digital Video	45J9292 ann 05/12/09 45K1610 ann 07/28/09	Charging tips for 90W Ultraslim AC/DC Con •iPod and iPhone Charge Tip (L10a) •Generic Micro USB charge tip (L18)	41R4481 ann 12/18/07 41R4490 ann 01/06/09
Keyboard		More information at www.lenovopowertips	s.com
TrackPoint Cap Collection USB Numeric Keypad Preferred Pro USB Keyboard Enhanced Performance USB Keyboard	73P2698 ann 12/16/03 33L3225 ann 05/01/00 73P5220 ann 06/21/05 73P2620 ann 03/23/04	Carrying Cases Up to 14" widescreen models: ThinkPad 14W Case Sleeve	57Y4294 ann 03/16/10
Lenovo Mini Wireless Keyboard N5901 <sup>52</sup> (blk) Ultraslim Wireless Keyboard and Mouse <sup>52</sup> <sup>52</sup> Wireless via 2.4GHz technology using a mi ThinkPad USB Keyboard with TrackPoint Preferred Pro USB Fingerprint Keyboard Lenovo USB Smartcard Keyboard	57Y6336 57Y4700 ann 09/15/09 cro-size USB receiver. 55Y9003 ann 08/18/09 73P4730 ann 02/22/05 51J0155 ann 03/24/09	Up to 15.4" widescreen models: ThinkPad 15W Case Sleeve Lenovo Business Messenger Case Lenovo Messenger Max Lenovo Performance BackPack ThinkPad Business Topload Case ThinkPad Business Backpack ThinkPad Deluxe Expander Case	51J0477 ann 08/18/09 51J0475 ann 08/18/09 41U5253 ann 05/01/07 41U5254 ann 05/01/07 43R2476 ann 05/13/08 43R2482 ann 05/13/08
Mouse Lenovo Optical Mouse (USB) Lenovo Laser Mouse (USB) ThinkPad USB Laser Mouse Lenovo ScrollPoint® Mouse (USB, Optical) ThinkPad Travel Mouse (USB, Optical) ThinkPad Bluetooth Laser Mouse Lenovo Optical Mouse A6010 (black)	06P4069 ann 05/21/03 41U3074 ann 01/23/07 57Y4635 ann 12/15/09 31P7405 ann 08/27/02 31P7410 ann 06/04/02 41U5008 ann 01/22/08 57Y6255	ThinkPad Executive Leather Case  Up to 15.6" widescreen models:  Wenger Backpack for Lenovo  Wenger Slim Case for Lenovo	43R2480 ann 05/13/08 57Y4271 ann 01/07/10 57Y4272 ann 01/07/10 57Y4273 ann 01/07/10
Lenovo Mini Optical Mouse M20B Lenovo Wireless Mouse N30B (black)  Security Kensington® MicroSaver® Cable Lock	55Y2091 55Y9360 73P2582 ann 12/29/03	Monitors Lenovo L2230x Wide 21.5" Monitor ThinkVision® L1711p 17" Monitor ThinkVision L1900p 19" Monitor	5453HB1 ann 06/10/10 5047HB2 ann 10/20/09 4431HE1 ann 11/11/08
Kensington Twin Head Cable Lock Lenovo Security Cable Lock USB Gemplus GemPC Smart Card Reader  Multimedia	45K1620 ann 09/30/08 57Y4303 ann 08/24/10 41N3040 ann 02/21/06	ThinkVision L1951p Wide 19" Monitor ThinkVision L2250p Wide 22" Monitor ThinkVision L2251p Wide 22" Monitor ThinkVision L2251x Wide 22" Monitor ThinkVision L2321x Wide 23" Monitor	2448HB6 ann 10/20/09 2572HB6 ann 10/20/09 2572HD6 ann 10/20/09 2578HB6 ann 10/20/09 4014HB6 ann 06/10/10
ThinkPad In-Ear Headphones Lenovo Mini Speaker M220 Lenovo Headphone P550	57Y4488 ann 01/07/10 55Y2033 55Y2065	ThinkVision L2440p Wide 24" Monitor  Monitor Accessories <sup>46</sup> ThinkVision USB Soundbar	4420HB2 ann 09/17/08 40Y7616 ann 08/23/05
Modem USB 2.0 Lenovo Modem	43R1814 ann 02/26/08	ThinkVision Soundbar Kensington MicroSaver Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock Lenovo Easy Reach Monitor Stand  46 Compatible on selected Lenovo and Thir	45K1263 ann 09/16/08 73P2582 ann 12/29/03 45K1620 ann 09/30/08 57Y4303 ann 08/24/10 55Y9258 ann 09/22/09 lkVision monitors.
		More information at www.lenovo.com/supp	
		For more information on ThinkPad SL acces www.lenovo.com/support/accessories www.lenovo.com/support/notebookacceswww.lenovo.com/support/security	
		Other accessories at www.lenovo.com/acc Accessories Guide pdf at www.lenovo.com/	





Lenovo® ThinkPad SL510



Lenovo ThinkPad SL510



Lenovo ThinkPad SL510



Lenovo ThinkPad SL510



ThinkPad SL510 Touchpad

2847-2.U T8670 2.00 GR 15.6" HD LED	proc- Type-model essor		ini PCle Finger Bat- WWAN Blue- print tery Avail tooth reader cells Preload date			
Processor Intel® Core® 12 Duo processor TS870 vith dual-core, 800MHz system bus, and 248 L2 cache or Intel HD Boock 1566MHz 25stem bus, and 248 L2 cache or Intel HD Boock 1566MHz 25stem bus, and 248 L2 cache or Intel HD Boock 1566MHz 25stem bus, and 248 L2 cache or Intel HD Boock 1566MHz 25stem bus, and 248 MB L2 cache or Intel HD Boock 1566MHz 25stem bus, and 248 MB L2 cache or Intel HD Boock 1566MHz 25stem bus, and 248 MB L2 cache or Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD Boock 1566MHz 25stem bus, and 348 MB L2 cache Intel HD B	2847-2KU T5870 2847-2LU T5870 2847-2QU P8700 2847-6GU T6670 2847-6HU T6670 2847-9VU T6570 2847-9VU T6570 2847-9VU T6570 2847-9ZU T6670 2847-9ZU T6670 2847-9ZU T6670 2847-AZU T6670	2.00 2GB 15.6" HD LED 2.0M GMA 250G 5400 DVD±RW * Intel 5100 <sup>28</sup> 2.03 4GB 15.6" HD LED 2.0M GMA 250G 5400 DVD±RW * Intel 5100 2.53 4GB 15.6" HD LED 2.0M GMA 250G 5400 DVD±RW * Intel 5100 2.20 2GB 15.6" HD LED 2.0M GMA 250G 5400 DVD±RW * Intel 5100 2.20 3GB 15.6" HD LED 2.0M GMA 250G 5400 DVD±RW * Intel 5100 VD 2.10 4GB 15.6" HD LED 2.0M GMA 250G 5400 DVD±RW * Intel 5100 VD 2.10 4GB 15.6" HD LED 2.0M GMA 320G 7200 DVD±RW * Intel 1000 2.10 2GB 15.6" HD LED 2.0M GMA 320G 7200 DVD±RW * Intel 1000 2.10 3GB 15.6" HD LED 2.0M GMA 250G 5400 DVD±RW * Intel 1000 2.10 3GB 15.6" HD LED 2.0M GMA 320G 7200 DVD±RW * Intel 1000 2.10 3GB 15.6" HD LED 2.0M GMA 320G 7200 DVD±RW * Intel 1000 2.10 2GB 15.6" HD LED 2.0M GMA 320G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 2.0M GMA 320G 7200 DVD±RW * Intel 1000 2.20 2GB 15.6" HD LED Glossy 2.0M GMA 250G 5400 DVD±RW * Intel 1000 2.20 2GB 15.6" HD LED 0.3M GMA 250G 5400 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 0.3M GMA 500G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 0.3M GMA 500G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 0.3M GMA 500G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 0.3M GMA 500G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 0.3M GMA 500G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 0.3M GMA 500G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 0.3M GMA 500G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 0.3M GMA 500G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 0.3M GMA 500G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 0.3M GMA 500G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 0.3M GMA 500G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 0.3M GMA 500G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 0.3M GMA 500G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 0.3M GMA 500G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 0.3M GMA 500G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 0.3M GMA 500G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 0.3M GMA 500G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" HD LED 0.3M GMA 500G 7200 DVD±RW * Intel 1000 2.20 3GB 15.6" H	Blue Fing 6 Pro 32 Oct 05 Blue Fing 6 Pro 32 Nov 05 Fro 32			
## Some: Genuine Windows*7 Intel Core 2 Duo processor P8700 with dual-core, Intel HD Boost, 10068MHz system bus, and 3MB L2 cache    Memory   2GB, 3GB, or 4GB std / 8GB max / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SC-DIMM sockets; a standard memory in both sockets on sockets available; Parializes, standard memory in both sockets, no sockets available; Parializes, standard memory in both sockets, no sockets available; Parializes, standard memory in both sockets, no sockets available; Parializes, standard memory in both sockets, no sockets available; Parializes, standard memory in both sockets, no sockets available; Parializes, standard memory in both sockets, no sockets available; Parializes, standard memory in both sockets, no sockets available; Parializes,						
SATA disk  160GB* (5400 rpm), 250GB (5400 rpm), 320GB (5400 rpm), or 500GB (7200 rpm), or 500GB (7200 rpm) SATA 3.0Gb/s, 2.5* wide, 9.5mm high, removable, upgradable, ThinkPad 3bock Mounted Hard Drive, Active Protection System™  Widescreen display  Widescreen and Power Manager ThinkPad Spock (200 ring, 16) aspect ratio, 500-1 contrast ratio Some: 15.6* (395mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500-1 contrast ratio Some: amera on top of screen, 0.3-megapixel or 2.0-megapixel, fixed focus Integrated graphics Media Accelerator 4500MHD (5M AS SOM) HD), in GM45, HDMI port supporting HDCP to output protected content Max external resolution: 2048x1536@ 7512+C (VGA DB-15 port); 1920x1080 (HDMI port) TrackPoint* Touch pad TrackPoint* jointing device, Internet Scrotial Paris, Marging glass Ultraklavi*, Wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-fouch Illuminated power button Ultraklavi*, 4/6-cell 15.6/ff (2010 preloaded; button) Ultraklavi*, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-fouch Illuminated power button Ultraklavi*, 4/6-cell 15.6/ff (2010 preloaded; button) Ultraklavi*, 4/6-cell 15.6/ff (2010 preloaded; button) Ultraklavi*, 4/6-cell 15.6/ff (2010 preloaded; button) Ultraklavi*, 100 touch pad below keyboard, Tap Zones, scrolling regions label, multi-fouch Illuminated power button Ultraklavi*, 4/6-cell 15.6/ff (2010 preloaded; button) Ultraklavi*, 100 touch pad below keyboard, Tap Zones, scrolling regions label, multi-fouch Illuminated power button Ultraklavi*, 100 touch pad below keyboard, Tap Zones, scrolling regions label, multi-fouch Illuminated power button Chase Battery - type*  Meight* Case Battery - type*  Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), 100 touch pad	Memory	800MHz system bus, and 2MB L2 cache or Intel Core 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache  2GB, 3GB, or 4GB std / 8GB max <sup>7</sup> / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Italics: standard memory in both sockets; no sockets available; Non-italics: standard memory in one socket; one socket available	Some: Genuine Windows® 7     Home Premium 64     Some: Genuine Windows 7     Professional 32     Some: Genuine Windows 7     Professional 64  Preloaded applications¹⁴ (only some)			
## Figure 1   Software (fingerprint formats)	SATA disk	<b>160GB</b> <sup>8</sup> (5400 rpm), <b>250GB</b> (5400 rpm), <b>320GB</b> (5400 or 7200 rpm), or <b>500GB</b> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™	<ul> <li>Rescue and Recovery™</li> <li>Access Connections™</li> <li>Password Manager</li> <li>ThinkVantage Power Manager</li> </ul>			
Integrated graphics   Intel Graphics Media Accelerator 4500MHD (CMA 4500MHD), in GM45, HDMI port) supporting HDCP to output protected content <i>Max external resolution:</i> 2048x1536@75Hz (VGA DB-15 port); 1920x1080 (HDMI port)   Skype** for Windows and App keys TrackPoint* Distrible golder golder graphics with the protection of the point golder golder golder graphics with the protection of	display	LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio  Some: 15.6" (395mm) HD (1366x768) color, VibrantView (glossy),  LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio	Fingerprint Software (fingerprint models)     ThinkVantage Toolbox     Adobe® Reader®			
TrackPoint® TrackPoint® TrackPoint® UltraNav® wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminated power button Dimensions® 46-cell 15.6W° (WDxhf!): 14.9° x 9.72° x 1.26–1.42°; 380 x 247mm x 32–36mm 4-cell: starting at 5.17 lb (2.35kg); 6-cell: starting at 5.18 lb (2.56kg) Color: ThinkPad Matte Black; Material: Scratch-resistant ABS plastic Lithium Ion 6-cell Battery - lite® 6-cell: up to 4.0 hr; 9-cell: up to 6 hr  Chipset Chipset Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), (ClH9M I/O Controller Hub), (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, one store there MAC), LPC bus (17872) One slot (ExpressCard/34) 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) None Multicard reader PC Card Samart Card read Three USB 2.0, one eSATA/USB combo port, external monitor (VGA DB-15, HDMI), eithernet (RJ-45) Mini PCI Express One: 11ab/g/n wireless*, Mini PCIe adapter, Intel Centrino® Wireless*, N1000, 1x2 Some: 11ab/g/n wireless*, Mini PCIe adapter, Intel Centrino® Wireless*, N1000, 1x2 Some: 11ab/g/n wireless*, Mini PCIe adapter, Intel WilmAx/WiFi Link 5150, 1x2 (300Mbps) WiFi + 1x2 WilmAx/Wireless*, Mini PCIe adapter and SIM, express N1000, 45K5997 ThinkPlus 3-year LPJU Sys N1000, 45K5997 ThinkPlus 4-year LPJU Depot 45K59	Integrated	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, HDMI port supporting HDCP to output protected content	<ul> <li>Skype™ for Windows</li> <li>Microsoft Office 2010 preloaded;</li> </ul>			
Battery - Ijfe³¹⁰ 6-cell: up to 4.0 hr; 9-cell: up to 6 hr  Chipset Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, ethernet MAC), LPC bus (IT8752)  One slot (ExpressCard/Multicard reader PC Card None Mone)  Mini PCI Express Intel 1000²² Three USB 2.0, one eSATA/USB combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)  Mini PCI Express Intel 1000²² Intel 5100²² Some: 11a/b/g/n wireless², Mini PCle adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)  Verizon¹⁵ Some: 11a/b/g/n and WiMAX wireless, Mini PCle adapter, Intel WiFi Link 5100, 1x2 (300Mbps) WiFi + 1x2 WiMAX (Echo Peak)  Verizon¹⁵ Some: Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCle adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon⁵ Some: Bluetooth 2.1 wireless, LED indicator  Bluetooth™ Realtek® RTL8111DL Gigabit Network Connection, PHY, PCle x1 None  Security Security Security Security Some: Fingerprint reader on palm rest, swipe sensor  Lithium lon 6-cell: up to 4.0 hr; 9-cell: up to 6 hr  Supports ThinkVantage® technologie  65-watt (GMA graphics) Ac adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant International Warranty Service¹¹  24 hour x 7 day¹® foll-free support during the warranty period¹²  24 hour x 7 day¹® foll-free support during the warranty period¹²  24 hour x 7 day¹® foll-free support during the warranty period¹²  24 hour x 7 day¹® foll-free support during the warranty period¹²  24 hour x 7 day¹® foll-free suport during the warranty period¹²  24 hour x 7 day¹® foll-free suport during the warranty period¹²  24 hour x 7 day¹® foll-f	TrackPoint® Touch pad  Lighting FX  Dimensions³ Weight²	TrackPoint® pointing device, Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminated power button  4/6-cell 15.6W" (WxDxH): 14.9" x 9.72" x 1.26–1.42"; 380 x 247mm x 32–36mm 4-cell: starting at 5.17 lb (2.35kg); 6-cell: starting at 5.64 lb (2.56kg)	Touch  Roxio® Creator® Business Edition (DVD±RW)  Roxio MyDVD® (DVD±RW)			
Chipset    Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, ethernet MAC), LPC bus (IT8752)   One slot (ExpressCard/34)   Multicard reader PC Card Smart Card read Ports			Supports ThinkVantage® technologies			
Mini PCI Express Intel 1000 <sup>28</sup> Intel 1000 <sup>28</sup> Intel 5100 <sup>28</sup> Some: 11b/g/n wireless <sup>4</sup> , Mini PCIe adapter, Intel Centrino® Wireless-N 1000, 1x2 (Shirley Peak) Some: 11a/b/g/n wireless, Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) A5K5968 WiMAX Some: 11a/b/g/n and WiMAX wireless, Mini PCIe adapt, Intel WiFi Link 5150, 1x2 (300Mbps) WiFi + 1x2 WiMAX (Echo Peak) Some: Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adptr, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon® AT&T <sup>23</sup> Some: Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T® NBD 45K5973 NBD 45K5975 NB	Chipset  ExpressCard Multicard reader PC Card Smart Card read	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, ethernet MAC), LPC bus (IT8752) One slot (ExpressCard/34) 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) None None Three USB 2.0, one eSATA/USB combo port, external monitor (VGA DB-15, HDMI),	EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹7 24 hour x 7 day¹8 toll-free support during the warranty period¹2			
1x2 (300Mbps) WiFi + 1x2 WiMAX (Echo Peak)  Verizon¹6  Some: Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCle adptr, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon®  AT&T²³  Some: Wireless WAN, Ericsson chipset, Mini PCle adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T®  Modem Bluetooth™ Some: Bluetooth 2.1 wireless, LED indicator  Ethernet Realtek® RTL8111DL Gigabit Network Connection, PHY, PCle x1 Intel AMT None  Audio support High Definition (HD) Audio, ALC269Q codec / stereo speakers, 1.5 watt / speaker volume up, down and mute buttons / mono microphone, mic mute button, mic input jack, headphone jack  Security Power-on password, hard disk password, supervisor password, security keyhole  Fingerprint reader  1x2 (300Mbps) WiFi + 1x2 WiMAX (Echo Peak) 45K5970  ThinkPlus 4-year LOR 9x5 NBD 45K5973  ThinkPlus 5-year LOR 9x5 NBD 45K5975  ThinkPlus 2-year P&L P/U Depot 45K5971  ThinkPlus 3-year P&L P/U Depot 45K5972  ThinkPlus 4-year P&L P/U Depot 45K5972  ThinkPlus 4-year P&L P/U Depot 45K5976  ThinkPlus 5-year P&L P/U Depot 45K5976	Intel 1000 <sup>28</sup> Intel 5100 <sup>28</sup>	One or two Mini PCI Express slots  Some: 11b/g/n wireless <sup>4</sup> , Mini PCIe adapter, Intel Centrino® Wireless-N 1000, 1x2  Some: 11a/b/g/n wireless, Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)	ThinkPlus 2-year LOR 9x5 NBD			
AT&T <sup>23</sup> AT&T <sup>23</sup> Some: Wireless WAN, Ericsson chipset, Mini PCle adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon 45K5973  Modem Bluetooth™ Some: Bluetooth 2.1 wireless, LED indicator 45K5975  Ethernet Realtek® RTL8111DL Gigabit Network Connection, PHY, PCle x1  Intel AMT None High Definition (HD) Audio, ALC269Q codec / stereo speakers, 1.5 watt / speaker volume up, down and mute buttons / mono microphone, mic mute button, mic input jack, headphone jack  Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Fingerprint reader  GPHS/WCDMA/HSPA, GPS, service contract required with Verizon 45K5975  ThinkPlus 5-year LOR 9x5 NBD 45K5975  ThinkPlus 2-year P&L P/U Depot 45K5971  ThinkPlus 3-year P&L P/U Depot 45K5972  ThinkPlus 4-year P&L P/U Depot 45K5974  ThinkPlus 5-year P&L P/U Depot 45K5976  Post-warranty annual maintenance agreements at		1x2 (300Mbps) WiFi + 1x2 WiMAX (Echo Peak)  Some: Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCle adptr, EV-DO Rev. A,	45K5970			
Modem BluetoothNone Some:Bluetooth 2.1 wireless, LED indicatorThinkPlus 2-year P&L P/U Depot 45K5971Ethernet Intel AMT Audio supportHigh Definition (HD) Audio, ALC269Q codec / stereo speakers, 1.5 watt / speaker volume up, down and mute buttons / mono microphone, mic mute button, mic input jack, headphone jackThinkPlus 3-year P&L P/U Depot 45K5972SecuritySecurity Power-on password, hard disk password, supervisor password, security keyhole Fingerprint readerNoneThinkPlus 4-year P&L P/U Depot 45K5974ThinkPlus 5-year P&L P/U Depot 45K5976Post-warranty annual maintenance agreements at	AT&T <sup>23</sup>	Some: Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM,	45K5973 ThinkPlus 5-year LOR 9x5 NBD			
Ethernet Intel AMT None Audio support High Definition (HD) Audio, ALC269Q codec / stereo speakers, 1.5 watt / speaker volume up, down and mute buttons / mono microphone, mic mute button, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole None Fingerprint reader  Healtek® R1L8111DL Gigabit Network Connection, PHY, PCIe x1  ThinkPlus 3-year P&L P/U Depot 45K5972  ThinkPlus 4-year P&L P/U Depot 45K5974  ThinkPlus 5-year P&L P/U Depot 45K5974  ThinkPlus 5-year P&L P/U Depot 45K5976  Post-warranty annual maintenance agreements at	Bluetooth™	None Some: Bluetooth 2.1 wireless, LED indicator	ThinkPlus 2-year P&L P/U Depot			
speaker volume up, down and mute buttons / mono microphone, mic mute button, mic input jack, headphone jack Security Power-on password, hard disk password, supervisor password, security keyhole Security chip None Fingerprint reader Some: Fingerprint reader on palm rest, swipe sensor  Think rus 4-year 1 &E 7 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at	Intel AMT	None	ThinkPlus 3-year P&L P/U Depot 45K5972			
Fingerprint reader Some: Fingerprint reader on palm rest, swipe sensor agreements at	Security	speaker volume up, down and mute buttons / mono microphone, mic mute button, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole	45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976			
	Fingerprint reader	Some: Fingerprint reader on palm rest, swipe sensor	agreements at			

See footnotes for important warranty information \* Intel Centrino® processor technology

"" US models announced September 28, 2010; \*Intel Centrino 2 processor technology

previous models on October 22, November 17, or December 15, 2009, or April 6, 2010

"US models withdrawn effective February or December 2010 or January 2011

<sup>©</sup> Lenovo (TOP1-3) October 2010

Type-model essor GHz	screen Memory display		grated graphics	SATA GB <sup>®</sup> rpm	SATA optical	802.11 wireless	WWAN	Blue- tooth	print reader	Preload	Avail date
2847-DJU T6670 2.20 2847-DKU T6670 2.20										Home P	

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Processor	Intel® Core™ 2 Duo processor T6670 with dual-core, 800MHz system bus, and 2MB L2 cache	Preloaded operating system <sup>20</sup> - Genuine Windows <sup>®</sup> 7
Memory	2GB or 4GB std / 8GB max <sup>7</sup> / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Home Premium 64  Preloaded applications¹⁴ (only some listed)  • Rescue and Recovery™
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in <b>250GB</b> <sup>8</sup> (5400 rpm) or <b>500GB</b> (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™	Access Connections <sup>™</sup> Password Manager     ThinkVantage Power Manager     ThinkVantage System Update
Widescreen display Camera	15.6" (395mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 0.3-megapixel, fixed focus	ThinkVantage Toolbox     Adobe® Reader®     Adobe Flash® Player     Skype™ for Windows
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, HDMI port supporting HDCP to output protected content Max external resolution: 2048x1536@75Hz (VGA DB-15 port); 1920x1080 (HDMI port)	Microsoft Office 2010 preloaded; purchase product key to activate     Roxio® Creator® Business Edition
Keyboard TrackPoint® Touch pad	6-row, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys TrackPoint® pointing device, Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch	(DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Lighting FX	Illuminated power button	Supports ThinkVantage® technologies
Dimensions <sup>3</sup> Weight <sup>2</sup> Case Battery - type <sup>37</sup> Battery - life <sup>10</sup>	4/6-cell 15.6W" (WxDxH): 14.9" x 9.72" x 1.26–1.42"; 380 x 247mm x 32–36mm 4-cell: starting at 5.17 lb (2.35kg); 6-cell: starting at 5.64 lb (2.56kg)  Color: ThinkPad Matte Black; Material: Scratch-resistant ABS plastic Lithium lon 6-cell 6-cell: up to 4.0 hr; 9-cell: up to 6 hr	65-watt (GMA graphics) AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service¹7
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, ethernet MAC), LPC bus (IT8752) One slot (ExpressCard/34)	24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup> via 800-426-7378
ExpressCard Multicard reader PC Card Smart Card read Ports	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) None None Three USB 2.0, one eSATA/USB combo port, external monitor (VGA DB-15, HDMI),	ThinkPlus™.22 1-year LOR24 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969
	ethernet (RJ-45)	ThinkPlus 3-year LOR 9x5 NBD 45K5970
11n <sup>28</sup> Intel 1000 <sup>28</sup> WWAN upg	One Mini PCI Express slot  Some: 11b/g/n wireless <sup>4</sup> , Mini-PCIe Adapter II  Some: 11b/g/n wireless, Mini PCIe adapter, Intel Centrino® Wireless-N 1000, 1x2  None	ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD
Modem Bluetooth™	None None	45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971
Ethernet Intel AMT	Realtek® RTL8111DL Gigabit Network Connection, PHY, PCIe x1 None	ThinkPlus 3-year P&L P/U Depot 45K5972
Audio support	High Definition (HD) Audio, ALC269Q codec / stereo speakers, 1.5 watt / speaker volume up, down and mute buttons /	ThinkPlus 4-year P&L P/U Depot 45K5974
Security Security chip	mono microphone, mic mute button, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole None	ThinkPlus 5-year P&L P/U Depot 45K5976
Fingerprint reader		Post-warranty annual maintenance agreements at
Limited warranty <sup>12</sup>	<sup>2</sup> <b>1-year</b> - depot repair service / service upgrades <sup>22</sup> available	lenovo.com/thinkplus/warranty

See footnotes for important warranty information US models announced January 11, 2011

- ★ Intel Centrino® processor technology
  ∴ Intel Centrino 2 processor technology

## ThinkPad® SL510 Accessories

Memory 1GB PC3-8500 DDR3 Low-Halogen SODIMM 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack 2GB PC3-8500 DDR3 Low-Halogen SODIMM 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack 4GB PC3-8500 DDR3 Low-Halogen SODIMM	x) 57Y4385 ann 06/23/09 1 55Y3707 ann 06/23/09 x) 57Y4386 ann 06/23/09	ThinkPad Battery 25++ (9-cell) 51J0500 ann 10/22	2/09 2/09
Storage and removable storage SL410/510 500GB Disk SATA 3G/s (5400 rpm	n) 43N3422 <i>ann 10/22/09</i>	More information at www.lenovo.com/alldaycomputing	
USB 2.0 Portable 320GB Hard Disk USB 2.0 Portable 500GB Hard Disk USB 2.0 Portable Secure 160GB Hard Disk USB 2.0 Portable Secure 320GB Hard Disk eSATA/USB 2.0 Secure 500GB Hard Drive USB 2.0 Portable DVD Burner	45K1689 ann 03/17/05 45K1690 ann 05/26/05 43R2018 ann 11/18/05 43R2019 ann 11/18/05 57Y4400 ann 01/07/10 43N3264 ann 01/05/10	90W Ultraslim AC/DC Combo Adapter 5/14600 ann 09/22	7/10
	+014020+ ann 01/00/10	Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493	
ThinkPad Expansion Lenovo® Essential Notebook Stand USB Port Replicator with Digital Video	45J9292 ann 05/12/09 45K1610 ann 07/28/09	iPod and iPhone Charge Tip (L10a)     41R4481 ann 12/18     Generic Micro USB charge tip (L18)     41R4490 ann 01/06     More information at www.lenovopowertips.com	3/07
Keyboard	7000000 40/40/00	····	
TrackPoint Cap Collection USB Numeric Keypad Preferred Pro USB Keyboard Enhanced Performance USB Keyboard Lenovo Mini Wireless Keyboard N5901 <sup>52</sup> (blk) Ultraslim Wireless Keyboard and Mouse <sup>52</sup> <sup>52</sup> Wireless via 2.4GHz technology using a m ThinkPad USB Keyboard with TrackPoint	57Y4700 ann 09/15/09 icro-size USB receiver. 55Y9003 ann 08/18/09	Up to 15.6" widescreen models: ThinkPad 15W Case Sleeve 51J0477 ann 08/18 Lenovo Business Messenger Case 51J0475 ann 08/18 Lenovo Messenger Max 41U5253 ann 05/01 Lenovo Performance BackPack 41U5254 ann 05/01 ThinkPad Business Backpack 43R2482 ann 05/13	3/09 1/07 1/07
Preferred Pro USB Fingerprint Keyboard Lenovo USB Smartcard Keyboard	73P4730 ann 02/22/05 51J0155 ann 03/24/09		
Mouse Lenovo Optical Mouse (USB) Lenovo Laser Mouse (USB) ThinkPad USB Laser Mouse Lenovo ScrollPoint® Mouse (USB, Optical) ThinkPad Travel Mouse (USB, Optical) ThinkPad Bluetooth Laser Mouse Lenovo Optical Mouse A6010 (black) Lenovo Mini Optical Mouse M20B	06P4069 ann 05/21/03 41U3074 ann 01/23/03 57Y4635 ann 12/15/03 31P7405 ann 08/27/02 31P7410 ann 06/04/02 41U5008 ann 01/22/08 57Y6255 55Y2091	Lenovo L2230x Wide 21.5" Monitor ThinkVision® L1711p 17" Monitor ThinkVision L1900p 19" Monitor ThinkVision L1951p Wide 19" Monitor ThinkVision L2250p Wide 22" Monitor ThinkVision L2251p Wide 22" Monitor ThinkVision L2351p Wide 22" Monitor ThinkVision L2351p Wide 22" Monitor ThinkVision L2351p Wide 23" Monitor ThinkVision L2351p Wide 23" Monitor	/09 /08 /09 /09 /09 /09 //10
Lenovo Wireless Mouse N30B (black)	55Y9360	Monitor Accessories <sup>46</sup>	2/25
Security Kensington® MicroSaver® Cable Lock Kensington Twin Head Cable Lock Lenovo Security Cable Lock USB Gemplus GemPC Smart Card Reader	73P2582 ann 12/29/03 45K1620 ann 09/30/08 57Y4303 ann 08/24/10 41N3040 ann 02/21/06	Kensington MicroSaver Cable Lock 73P2582 ann 12/28 Kensington Twin Head Cable Lock 45K1620 ann 09/30 Lenovo Security Cable Lock 57Y4303 ann 08/24 Lenovo Easy Reach Monitor Stand 55Y9258 ann 09/22	6/08 9/03 0/08 4/10
Multimedia		<sup>46</sup> Compatible on selected Lenovo and ThinkVision monitors.	
ThinkPad In-Ear Headphones Lenovo Mini Speaker M220 Lenovo Headphone P550	57Y4488 ann 01/07/10 55Y2033 55Y2065	More information at www.lenovo.com/support/monitoraccessor For more information on ThinkPad SL accessories, please visit: www.lenovo.com/support/accessories	ries
Modem		www.lenovo.com/support/notebookaccessories	
USB 2.0 Lenovo Modem	43R1814 ann 02/26/08	www.lenovo.com/support/security Other accessories at www.lenovo.com/accessories	
		Accessories Guide pdf at www.lenovo.com/accessoriesguide	
		1	- 1

**Availability:** All offers subject to availability. Lenovo reserves the right to alter product offerings and specifications at any time, without notice. Lenovo is not responsible for photographic or typographic errors.

**Warranty:** For a copy of applicable product warranties, write to: Warranty Information, P.O. Box 12195, RTP, NC, 27709, Attn: Dept ZPYA/B676. Lenovo makes no representation or warranty regarding third party products or services.

#### Footnotes:

- Power management, including Intel® SpeedStep® Technology, reduces processor speed when in battery mode.
- Weight includes battery and standard optical drive; weight may vary due to vendor components, manufacturing process and options.
- Thinness may vary at certain points on the system.
- Wireless capability: Requires compatible wireless-enabled options sold separately.
- Public network download modem speeds are limited to 53Kbps. Upload speeds are limited to 48Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require compatible phone line and server equipment. Check with your telephone and ISP service providers for availability.
- Maximum memory capacity may require the replacement of standard component with largest supported component available. On ThinkPad systems, even though it is possible to physically install 4GB of memory, the actual amount of memory addressable by a 32-bit operating system will be limited to 3GB. This limitation does not exist with 64-bit operating systems.
- B Hard drive: GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.

- <sup>10</sup> Battery: These model numbers achieved the battery life based on MobileMark® 2007 during testing. Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.
- <sup>12</sup> Limited warranty: Support unrelated to a warranty issue may be subject to additional charges.
- 13 Internet access not included.
- <sup>14</sup> Included software may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.
- <sup>16</sup> Activating Verizon Wireless Service: Lenovo customers will be contacted after purchase to activate service; requires separate agreement with Verizon Wireless and is subject to the Customer Agreement, Calling Plan, and credit approval. Service, airtime, and early termination charges may apply. Verizon Wireless, not Lenovo, is solely responsible for service. Service not available in all areas; purchaser is responsible for verifying that service is available for the intended location before purchasing a computer equipped with WAN card. Network details, coverage limitations, and maps at www.verizonwireless.com.
- <sup>17</sup> International Warranty Service is available in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.

- <sup>18</sup> Telephone support may be subject to additional charges, even during the limited warranty period. Response times may vary. May exclude some holidays. If a machine is listed as having "On-site service for select repairs", this means that onsite service is available only for the replacement of select parts. For all other warranty repairs, Lenovo will provide the customer a replacement part for customer installation. The parts for which onsite service is available varies by machine, but may include the processor, power supply, heat sink, system board, or base cover. For ThinkPad notebooks with EasyServ or Courier service, Lenovo will attempt to diagnose and resolve the problem remotely before sending a courier.
- <sup>19</sup> EasyServ depot repair service: In the United States call 1-800-426-7378. The customer may be asked certain diagnostic questions before a courier is sent. Your ThinkPad purchase includes this depot repair service, available in the U.S. during the limited warranty period.
- Operating System: Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to lenovo.com/pc/support and enter your machine type and model number for more information.

- <sup>22</sup> ThinkPlus Services: These services are available for machines normally used for business, professional, or trade purposes, rather than personal, family, or household purposes. Not all machine types and models are covered. Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. Service levels are response time objectives and are not guarantees. If the machine problem turns out to be a Customer Replaceable Unit (CRU), a part will be express shipped to you for quick replacement. Onsite 24x7x2-hour service is not available in all locations. For Think-Pad notebooks requiring LCD or other component replacement, Lenovo may choose to perform service at the depot repair center. Calls must be received by 5 pm local time in order to qualify for Next Business Day service. P&L means parts and labor, P/U means pick-up. See ThinkPlus terms and conditions for complete details and restrictions.
- 23 Activating AT&T Wireless Service:

Requires separate agreement with AT&T, subject to service agreement, rate plan and coverage maps. AT&T, not Lenovo, is solely responsible for service. Coverage not available in all areas; AT&T BroadbandConnect available in select metropolitan markets. Special credit and tenure restrictions and additional charges may apply to international roaming. A network connection, thirdparty software, additional hardware, and/ or subscription to a third-party service may be required for certain solutions/ applications. Additional restrictions apply, including early termination fee; see www.wireless.att.com for details. To activate call Lenovo Wireless Activation Hot Line at 1-877-299-4710.

- <sup>24</sup> Limited onsite service systems are designed to be repaired during the applicable warranty period primarily with customer-replaceable parts provided by Lenovo. Lenovo will only send a technician onsite to perform a repair if (a) remote telephone diagnosis and/or customer part replacement are unable to resolve the problem, or (b) the part is one of the few designated by Lenovo for onsite replacement. For a list of onsite replaceable parts, contact Lenovo. In the United States call 1-800-426-7378. Support unrelated to a warranty issue may be subject to additional charges. Lenovo onsite repair (LOR), 8 am to 5 pm, Monday through Friday coverage excluding holidays, next business day (NBD) response time.
- Based on IEEE 802.11a and 802.11b. A customer can not upgrade to a different wireless Mini PCI adapter due to FCC regulations. Security screws prevent removal of this adapter. This wireless LAN product has been designed to permit legal operation world-wide in regions which it is approved. This product has been tested and certified to be interoperable by the Wireless Ethernet Compatibility Alliance and is authorized to carry the Wi-Fi logo.

- The IEEE 802.11n specification (MIMO) has been finalized and is currently in IEEE 802.11n-2009 release. The maximum speed depends on the access point device and the number of integrated antenna used for connection. An adapter with 11a/b, 11a/b/g, 11b/g/n, or 11a/b/g/n can communicate on any of its supported formats.
- Measures only maximum data transfer rate, not application performance. Many factors affect application performance.
- Wireless: Based on IEEE 802.11a, 802.11b, and 802.11g respectively. An adapter with 11a/b, 11b/g, or 11a/b/g can communicate on either/any of these listed formats respectively, the actual connection will be based on the access point to which it connects.

- Operating system: Level of support varies by operating system. Operating systems not preloaded on the system may not provise full feature functionality. Refer to lenovo.com/think/support and enter your machine type and model number for more information.
- <sup>37</sup> Battery: The ThinkPad Edge and ThinkPad SL series do not support batteries that are not genuine Lenovo-made or authorized. These systems will continue to boot, but may not charge unauthorized batteries.
  Warning: Lenovo has no responsibility for the performance or safety of unauthorized batteries, and provides no warranties for failures or damage arising out of their use.

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Visit www.lenovo.com/psref for the latest version of Personal Systems Reference.

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> Lenovo 1009 Think Place Morrisville, NC 27560 U.S.A.

January 2011 slbook.pdf



# Personal Systems Reference Lenovo® ThinkCentre TopSeller™ Desktops

January 2011 - Version 391

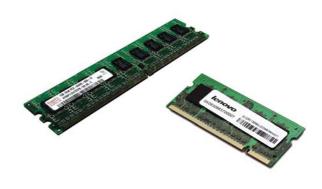


Lenovo ThinkCentre M90/M90p (Eco Ultra Small, Small, Tower Form Factors)

# ThinkCentre<sub>®</sub>



Kensington® MicroSaver® Cable Lock 73P2582 Kensington Twin Head Cable Lock 45K1620



1GB PC3-8500 DDR3 UDIMM 45J5434 2GB PC3-8500 DDR3 UDIMM 45J5435 1GB PC3-8500 DDR3 Low-Halogen SODIMM 55Y3706 2GB PC3-8500 DDR3 Low-Halogen SODIMM 55Y3707 (UDIMM for SFF, Tower only; SODIMM for Eco USFF only)



NVIDIA® GeForce® 310 DMS59 (2-DVI, 2-VGA) 57Y4167



Lenovo® USB-to-DVI Monitor Adapter 45K5296



Ultraslim Wireless Keyboard and Mouse 57Y4700



Lenovo Laser Mouse (USB) 41U3074







Lenovo ThinkCentre M58 Eco Ultra Small



Lenovo ThinkCentre M58 Eco Ultra Small with dual Lenovo ThinkVision monitors





Lenovo ThinkCentre M58 Small



Lenovo ThinkCentre M58 Small with Lenovo ThinkVision monitor





Lenovo ThinkCentre M58 Tower



Lenovo ThinkCentre M58 Tower with dual Lenovo ThinkVision monitors

Slot x Name Type-model bay GHz Cores Memory<sup>8</sup> disk SATA optical Graphics Monitor DisplayPort ENERGY Intel Win7 Global conn dongle STAR 5.0 vPro preload Educ Avail date Processor

M58 8820-AQU 1x2 Core 2 Duo E7500 2.93 2 2GB 250GB<sup>2</sup> DVD±RW GMA VGA, DP ES50 None Pro 32 None Jan 10 None

- $\bullet$  This small and medium business (SMB) model is part of the US TopSeller  $^{\text{\tiny TM}}$  Program
- This model has a 3-year limited warranty
   This system is Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor Implementation	Mainstream enterprise sta Intel® Core™ 2 Duo Proce 1066MHz system bus, and Processor in LGA775 sock	essor E7500 with dual-core, I 3MB L2 cache	Eco Ultra Sn	optical disk				
Memory	dual-channel capable, two	8500 1066MHz DDR3, non-parity, 204-pin SODIMM sockets (notebook); lory in one socket; one socket available	Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk					
Graphics	integrated graphics in Q45 one analog VGA DB-15 co	celerator 4500 (GMA 4500), , uses main memory (up to 765MB), nnector, one DisplayPort™ connector 0 via cable 45J7915), HDCP, DirectX® 10, t display	<ul> <li>Business bl</li> <li>10.8" W X 9</li> <li>275mm W X</li> <li>9.2 lb (4.2 kg)</li> </ul>	rofile, 32-bit PCI 2.3 ack color; metal case 9.4" D X 3.1" H X 238mm D X 80mm H g) in maximum configuration				
SATA disk SATA controller SATA DVD±RW SATA cables	Serial ATA, SATA 3.0Gb/s, Super Multi-Burner DL DV	00 rpm, vibration dampening mounts integrated in ICH10DO, RAID 0/1 support D±RW SATA 1.5Gb/s Drive drop to device), two SATA connectors on planar	Hinged toolless cover for easy serviceability     Toolless disk and optical drive removal     Toolless systemboard retention     System floor stand for vertical orientation					
eSATA port Diskette drive Media reader	None None None			Security  Security chip (see information on left) Security slot (in rear for attachment of				
Chipset	Digital Office [ICH10DO] (	et (PCI Express® 2.0 x16), I/O Controller H SATA 3.0Gb/s with RAID 0/1 support, PCI SB, LPC bus), SMSC® SCH5617 Super I/O	Express x1,	optional Kensington® MicroSaver® cable) - security slot and cover release button are combined into one latch for improved chassis security				
Front ports Rear ports Internal connector Rear audio ports Audio Speaker Ethernet Intel AMT Modem Security chip	Six USB 2.0, ethernet (RJ- Two USB 2.0 planar conn Line-in (stereo, 3.5mm), lir High Definition (HD) Audio One internal speaker for b Gigabit ethernet on planar None None	(stereo, 3.5mm), headphone (stereo, 3.5m-45), monitor (VGA DB-15, DisplayPort) (1 used; one open for media reader or 2 repe-out (stereo, 3.5mm), microphone (stereo, Analog Devices AD1882 codec usiness audio, Intel 82567LM, Wake on LAN®, ASF2.0, I	par USB ports) p, 3.5mm)	Power-on password Administrator password Hard disk password (user and master) Boot sequence control Boot without diskette, keyboard Individual USB port disablement				
Keyboard Mouse	Preferred Pro USB Keyboa Optical Wheel Mouse (USI	ard (USB connector), 104-key, black, Lenov B connector), 400 dpi, black, Lenovo logo		Supports ThinkVantage® technologies				
Preloaded oper - Genuine Wind	• •	30 watts, autosensing, 87% PSU  Accessories 500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant				
<ul> <li>Rescue and R</li> <li>Password Mar</li> <li>ThinkVantage</li> <li>ThinkVantage</li> <li>ThinkVantage</li> <li>Lenovo Online</li> <li>Norton™ Interior</li> <li>(30 days of vir</li> <li>Adobe® Reade</li> <li>Adobe Flash®</li> <li>Microsoft Office</li> <li>purchase process</li> </ul>	nager System Update Power Manager Toolbox Data Backup net Security 2011 us definitions) Pr Player e 2010 preloaded; luct key to activate P Business Edition	1TB SATA 3.0Gb/s Disk (7200 rpm) Super Multi-Burner DL DVD±RW SATA D DisplayPort to Single-link DVI-D Cable DisplayPort to VGA Monitor Cable Lenovo Vertical PC and Monitor Stand II ThinkCentre Ultra Small Under Desk Mou More accessories on O-MS8 sheet Acc Guide in pdf lenovo.com/accessories Other accessories at lenovo.com/access	45J7915 57Y4393 41R4474 ant 40Y8625 esguide	Limited Warranty¹  3-year parts and labor  International Warranty Service⁰  Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)  Onsite service upgrade options (in eligible locations):7  3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)  3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)  4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)  4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)  4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)  ThinkPlus services at lenovo.com/thinkplus/warranty  Post warranty maintenance services available  24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378				

Name Type-model	Slot x bay	Processor	GHz (	ores	Memory	SATA 8 disk	SATA optical	Graphics		DisplayPort dongle	Intel vPro	Win7 preload		Avai date		
<b>M58</b> 8910-AUU	2x3 2x3 2x3	Pentium E5400 Pentium E5700 Core 2 Duo E7500 Core 2 Quad Q9500 Core 2 Duo E7500		2 4	2GB 2GB 2GB 4GB 4GB	250GB <sup>2</sup> 250GB 250GB 320GB 320GB	DVD±RW DVD±RW DVD±RW DVD±RW DVD±RW	GMA GMA GMA GMA GMA	VGA, DE VGA, DE VGA, DE VGA, DE VGA, DE	P None P None P None	None None None	Pro 32 Pro 32 Pro 32 Pro 32 Pro 64	None None None	Jan 1 Mar 1		
	• T	hese small and med hese models have a hese systems are M	3-year	limite	d warra	nty¹	-			Program						
Positioning Processor	Inte 800 Inte 106 Inte 133	I <sup>®</sup> Pentium <sup>®</sup> Proces MHz system bus, an I Core™ 2 Duo Proo 6MHz system bus, a I Core 2 Quad Proo 3MHz system bus, a	system bus, and 6MB L2 cache  Bay ② 3.5"  Bay ③ 3.5"							optical disk (in rear)  ", 1.6" high, access, std optical , 1" high, no access, std disk , .5" high, access, open (reader)						
Implementation  Memory	2GE non- Italia	cessor in LGA775 so 3 or 4GB std, 16GB -parity, dual-channel cs: standard me -italics: standard me	max <sup>8</sup> , <b>F</b> capable mory ir	e, fou i two	ır 240-pi sockets	n DIMM s ; two sock	ockets; ets available	Slot 1 Slot 2 • Bus • 12.9	: Low Pro 2: Low Pro siness bla 5" W X 14	ofile, PCI Expofile, 32-bit Fack color; me 1.0" D X 3.9"	press 2 PCI 2.3 Ital case H	Э	·			
Graphics	integ (up one (sup	I Graphics Media A grated graphics in Q to 765MB [2GB mod analog VGA DB-15 ports single-link DVI ports dual independe	45, use lels] or connec -D via d	s mai 1759l tor, or able	n memo MB <i>[4GI</i> ne Displ	ory B <i>models]</i> ayPort™ d	), connector	• 16.3 • Too • Too • Too ), • Too	5 lb (7.5 k lless cove lless disk lless ada lless syst	355mm D X  (g) in maximer flips up ar  (, optical driver retention  (emboard retention stand for ve	um con nd tilts b re remo n tention	figuratior ackward val	on rea	r hinge		
SATA disk SATA controller SATA DVD±RW SATA cables eSATA port Diskette drive Media reader	Seri Sup Two		s, integ VD±RV 1-drop 1	rated V SA o dev	in İCH1 FA 1.5G	0DO, RAI b/s Drive	D 0/1 suppo	ort		Security of Security optional keactive	chip (se slot (in i Kensing Il cable	rear for a ton® Micı	ttachmeroSaver s the co	ent of ® cable over by		
Chipset	Digi	I Q45 Express Chip tal Office [ICH10DO ernet MAC, PCI 2.3,	(SAÌA	3.0G	b/s with	RAID 0/1	support, Po	CI Expre	Power-on password     Administrator password				r and m	aster)		
Rear audio ports Audio Speaker	Six eSA r Two Line High One	USB 2.0 planar con e-in (stereo, 3.5mm), n Definition (HD) Auc internal speaker for	n), ethe n (1 use line-ou lio, Ana busine	rnet ( ed; or (ster log D ss au	(RJ-45), ne open reo, 3.5r levices / idio	monitor ( for media nm), micro AD1882 co	VGA DB-15 reader or 2 ophone-in (s odec	, Display rear US stereo, 3	B ports) .5mm)	<ul><li>Boot with</li><li>Serial poi</li><li>Individual</li></ul>	rt I/O co	ontrol				
Ethernet Intel AMT Modem Security chip	Non Non									Supports T			chnolog	jies		
Keyboard Mouse	Pref	erred Pro USB Keyb ical Wheel Mouse (U	oard (L	SB c	onnecto	r), 104-ke	y, black, Lei	novo® log	'	RoHS-com	pliant					
Power supply  Preloaded opel - Some: Genui Profes - Some: Genui Profes  Preloaded appl some listed)  • Rescue and F • Password Mai • ThinkVantage • ThinkVantage • ThinkVantage • Lenovo Online • Norton™ Inter (30 days of vii • Adobe® Read • Adobe Flash® • Microsoft Offic purchase proc • Roxio® Creato (DVD±RW) • Roxio MyDVD	rating was a construction of the construction	indows® 7 al 32 indows 7 al 64 cons⁵ (all OSes; only ery™ em Update er Manager oox a Backup ecurity 2011 efinitions) er 10 preloaded; ey to activate sisiness Edition	Acc 1GE 2GE 5000 1TB Sup Disp Disp NVIII More	esso PC3 PC3 SB S SATA er Mu layPo layPo DIA® e aco	B-8500 E B-8500 E ATA 3.0 G A 3.0 G Julti-Burn Fort to Si Cort to V Quadro eessories	DDR3 UDI DDR3 UDI Gb/s Disk /s Disk (7/2 er DL DVI ngle-link D AA Monito 256MB I s on O-M5	MM (7200 rpm) (200 rpm) D±RW SATA VI-D Cable r Cable VVS 290	4 4 4 4 Drive 4 4 5 4	5J7915 7Y4393 3R1765	for select Mon - From next bus onsite so (in eligible - 3-year (Think - 3-year (Think - 4-year	arts and arts and arts and arts and arts and arts and arts are arts are arts and arts are art	arranty S aceable l I limited of ts³, 8 am age exclutary responsive tions): x5, 4 hou bart number x5, 4 hou tr number x5, 4 hou tr number x4x7, 4 ho tr number	service <sup>9</sup> Jnit (CF onsite s 1 - 5 pm uding h onse tin options or respo or 41C91 or 41C91 or 41C91 rranty nce e suppo	RU) service solidays ne) sinse sol192) onse 93) sss Day 94) onse 95) onse		

	Name	Type-model	Slot x bay		GHz (	Cores	Memory <sup>8</sup>	SATA disk	SATA optical	Graphics		DisplayPort dongle			Global Educ	Avail date
	M58	9960-ALU	4x4	Core 2 Duo E7500	2.93	2	2GB	250GB <sup>2</sup>	DVD±RW	/ GMA	VGA, DP	None	None	Pro 32	None	Jan 10
133	M58	9960-APU	4x4	Core 2 Quad Q9500	2.83	4	4GB	320GB	<b>DVD</b> ±RW	/ GMA	VGA, DP	None	None	Pro 32	None	Mar 10
133	M58	9960-AMU	4x4	Core 2 Duo E7500	2.93	2	4GB	320GB	<b>DVD</b> ±RW	/ GMA	VGA, DP	None	None	Pro 64	None	Mar 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Mainstream enterprise stability and manageability Intel® Core™ 2 Duo Processor E7500 with dual-core, 1066MHz system bus, and 3MB L2 cache or Intel Core 2 Quad Processor Q9500 with quad-core, 1333MHz system bus, and 6MB L2 cache Processor in LGA775 socket	• 6.9" W X 17 • 175mm W X	ack color; metal case .3" D X 15.8" H (440mm D X 402mm H D kg) in max configuration op front	
Memory	<b>2GB</b> or <b>4GB</b> std, 16GB max <sup>8</sup> , <b>PC3-8500 1066MHz DDR3</b> , non-parity, dual-channel capable, four 240-pin DIMM sockets; <i>Italics:</i> standard memory in two sockets; two sockets available; <i>Non-italics:</i> standard memory in one socket; 3 sockets available	Toolless cover removal     Toolless disk, diskette drive,   !		
Graphics	Intel Graphics Media Accelerator 4500 (GMA 4500), integrated graphics in Q45, uses main memory (up to 765MB [2GB models] or 1759MB [4GB models]), one analog VGA DB-15 connector, one DisplayPort™ connector (supports single-link DVI-D via cable 45J7915), HDCP, DirectX® 10, supports dual independent display	Bay ② 5.25", Bay ③ 3.5", Bay ④ 3.5", Slot 1: half-lei	1" high, no access, std disk ngth,full-height, PCIe 2.0 x16 (75w max)	
SATA disk SATA controller SATA DVD±RW	250GB or 320GB, SATA 3.0Gb/s 7200 rpm, vibration dampening Serial ATA, SATA 3.0Gb/s, integrated in ICH10DO, RAID 0/1 Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	Slot 3: half-lei	ngth,full-height, PCIe x1 ngth,full-height, 32-bit PCI 2.3 ngth,full-height, 32-bit PCI 2.3	
SATA cables	Two SATA cables (each 1-drop to device), three SATA connectors and one eSATA connector on planar		Security	
eSATA port Diskette drive Media reader	None None		Security chip (see information on left)     One lock to secure both cover and entire system to fixed object:	
Chipset	Intel Q45 Express Chipset (PCI Express® 2.0 x16), I/O Controller In Digital Office [ICH10D0] (SATA 3.0Gb/s with RAID 0/1 support, PCI ethernet MAC, PCI 2.3, USB, LPC bus), SMSC® SCH5617 Super I/O	Express x1,	Padlock loop (in rear for opt padlock)     Security slot (in rear for optional Kensington® MicroSaver® cable)     Power-on password	
Front ports Rear ports Internal connector Rear audio ports Audio Speaker	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5m Six USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), etherne monitor (VGA DB-15, DisplayPort)  Two USB 2.0 planar conn (1 used; one open for media reader or 2 rule Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, Definition (HD) Audio, Analog Devices AD1882 codec One internal speaker for business audio	t (ŔJ-45), ear USB ports) ereo, 3.5mm)	Administrator password     Hard disk password (user and master)     Boot sequence control	
Ethernet Intel AMT	Gigabit ethernet on planar, Intel 82567LM, Wake on LAN®, ASF2.0, None	DASH 1.0	Supports ThinkVantage® technologies	
Modem Security chip	None Winbond® WPCT200 SafeKeeper™ Trusted Platform Module, TCG 1	<u> </u>	GREENGUARD® certified RoHS-compliant	
Keyboard Mouse Power supply	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenco Optical Wheel Mouse (USB connector), black, Lenco logo 280 watts with variable speed fan, manual switch, two diagnostic LE	Ü	Limited Warranty¹	
Proloaded oper	ating system <sup>20</sup>		⇒ International Warranty Service9	

### Preloaded operating system<sup>20</sup>

- Some: Genuine Windows® 7 Professional 32 Some: Genuine Windows 7 Professional 64
- Preloaded applications<sup>5</sup> (only some listed)
- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update ThinkVantage Power Manager

- ThinkVantage Toolbox Lenovo Online Data Backup
- Norton™ Internet Security 2011 (30 days of virus definitions) Adobe® Reader® Adobe Flash® Player

- Microsoft Office 2010 preloaded;
- purchase product key to activate Roxio® Creator® Business Edition (DVD±RW)
- Roxio MyDVD® (DVD±RW)

#### **Accessories**

1GB PC3-8500 DDR3 UDIMM 45J5434 2GB PC3-8500 DDR3 UDIMM 45J5435 500GB SATA 3.0Gb/s Disk (7200 rpm) 43R1990 1TB SATA 3.0Gb/s Disk (7200 rpm) 45J7918 Super Multi-Burner DL DVD±RW SATA Drive 41N5620 Blu-ray™ Burner SATA 1.5Gb/s Drive 45K1675 DisplayPort to Single-link DVI-D Cable 45J7915 DisplayPort to VGA Monitor Cable NVIDIA® Quadro® 256MB NVS 290 NVIDIA Quadro 256MB NVS 295 57Y4393 43R1765 45K1669 More accessories on O-M58 sheet

Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories

- ✓ International Warranty Service<sup>9</sup>
   ✓ Customer Replaceable Unit (CRU)
- parts only (with limited onsite service for selected parts3, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)
- Onsite service upgrade options (in eligible locations):
  - 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)
  - 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)
  - 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194)
  - 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)
  - 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)
- ThinkPlus services at lenovo.com/thinkplus/warranty
- Post warranty maintenance services available
- 24 hour x 7 day14 toll-free support during the warranty period via 800-426-7378

Slot x Name Type-model bay GHz Cores Memory<sup>8</sup> disk SATA optical Monitor DisplayPort ENERGY Intel Win7 Global conn dongle STAR 5.0 vPro preload Educ Processor Graphics date M58p 9961-ALU 1x2 Core 2 Duo E8400 3.00 2 2GB 250GB2 DVD±RW GMA VGA, DP ES50 vPro Pro 32 No Jan 10 None

- Intel Core 2 Processor with vPro™ Technology (includes Intel Active Management Technology)
   This small and medium business (SMB) model is part of the US TopSeller™ Program

- This model has a 3-year limited warranty

  This system is Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor		essor E8400 with dual-core, FXT, 1333MHz system bus,	Eco Ultra Sn	nall	optical disk				
Memory	dual-channel capable, two	8500 1066MHz DDR3, non-parity, 204-pin SODIMM sockets (notebook); ory in one socket; one socket available	Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk  Slot 1: Low Profile, 32-bit PCI 2.3						
Graphics	integrated graphics in Q45 one analog VGA DB-15 co	elerator 4500 (GMA 4500), , uses main memory (up to 765MB), nnector, one DisplayPort™ connector via cable 45J7915), HDCP, DirectX® 10, display	• 10.8" W X 9 • 275mm W 2 • 9.2 lb (4.2 k • Hinged tool	siness black color; metal case 8" W X 9.4" D X 3.1" H imm W X 238mm D X 80mm H lb (4.2 kg) in maximum configuration ged toolless cover for easy serviceability					
SATA disk SATA controller SATA DVD±RW SATA cables	Serial ATA, SATA 3.0Gb/s, Super Multi-Burner DL DVI	0 rpm, vibration dampening mounts integrated in ICH10DO, RAID 0/1 D±RW SATA 1.5Gb/s Drive drop to device), two SATA connectors	<ul> <li>Toolless sys</li> </ul>	stemboard	cal drive removal retention vertical orientation				
eSATA port Diskette drive Media reader	and one eSATA connector None None None			<ul> <li>Securit options</li> </ul>	Security ty chip (see information on left) ty slot (in rear for attachment of al Kensington® MicroSaver® cable)				
Chipset	Digital Office [ICH10DO] (	et (PCI Express® 2.0 x16), I/O Controller H BATA 3.0Gb/s with RAID 0/1 support, PCI BB, LPC bus), SMSC® SCH5617 Super I/O	Express x1,	are c	rity slot and cover release button combined into one latch for coved chassis security on password				
Rear audio ports Audio Speaker Ethernet	Six USB 2.0, ethernet (RJ- Two USB 2.0 planar conn ( Line-in (stereo, 3.5mm), lin High Definition (HD) Audio One internal speaker for bu Gigabit ethernet on planar,	Intel 82567LM, Wake on LAN®, ASF2.0,	ear USB ports) o, 3.5mm)	Boot without diskette, keyboard Individual USB port disablement					
Intel AMT Modem Security chip	Intel Active Management T None Winbond® WPCT200 Safel	Reper™ Trusted Platform Module, TCG 1	.2-compliant	Supports ThinkVantage® technologies  - EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant					
Keyboard Mouse Power supply	Optical Wheel Mouse (USI	urd (USB connector), 104-key, black, Leno 3 connector), 400 dpi, black, Lenovo logo 30 watts, autosensing, 87% PSU	vo® logo						
Preloaded appli  Rescue and R  Password Mar  ThinkVantage  ThinkVantage  ThinkVantage  Lenovo Online  Norton™ Interr  (30 days of virtor  Adobe® Reade  Adobe Flash®  Microsoft Offic purchase prod	ows® 7 Professional 32 cations⁵ (only some listed) ecovery™ lager System Update Power Manager Toolbox Data Backup net Security 2011 us definitions) er® Player e 2010 preloaded; uct key to activate ® Business Edition	43R1990 45J7918 Prive 41N5620 45J7915 57Y4393 41R4474 40Y8625 esguide sories	internation Custon parts for see Mon-next to Onsite (in eliin of the custon cus	Limited Warranty¹ r parts and labor national Warranty Service³ omer Replaceable Unit (CRU) only (with limited onsite service elected parts³, 8 am - 5 pm, Fri coverage excluding holidays, ousiness day response time) e service upgrade options gible locations):² ear LOR 9x5, 4 hour response inkPlus™ part number 41C9192) ear LOR 9x5, Next Business Day inkPlus part number 41C9194) ear LOR 9x5, Vext Business Day inkPlus part number 41C9195) ear LOR 9x5, 4 hour response inkPlus part number 41C9195) ear LOR 9x5, 4 hour response inkPlus part number 41C9196) :Plus services at o.com/thinkplus/warranty warranty maintenance ces available ur x 7 day¹⁴ toll-free support g the warranty period¹ 10-426-7378					

	Slot x				SATA	SATA		Monitor	DisplayPor	t Intel	Win7	Global	Avail
Name Type-model	bay Proces			Memory	disk	optical		connector	s dongle	vPro	preload	Educ	date
M58p 9964-ABU M58p 9964-ACU M58p 9964-ADU	2x3 Core 2 Quad	d Q9400 2.66		4GB	320GB	DVD±RW DVD±RW DVD±RW	GMA	VGA, DF VGA, DF VGA, DF	None	vPro	Pro 32 Pro 32 Pro 64	None	Jan 10 Jan 10 Mar 10
	<ul> <li>Intel Core 2 Present</li> <li>These small are</li> <li>These models</li> <li>These systems</li> </ul>	nd medium bus have a 3-year	siness (S limited v	SMB) mo warranty	odels are	e part of the	US Top	Seller™ Pı		<i>'</i> )			
Positioning Processor	Mainstream enter Intel® Core™ 2 D Virtualization Tecl and 6MB L2 cach Intel Core 2 Qua Virtualization Tecl	hnology, TXT, te or d Processor ( hnology, TXT,	<b>· E8400</b> 1333MH <b>Q9400</b> v	with <b>du</b> alz syster	<b>aÍ-core</b> , m bus, <b>d-core</b> ,			5.25", 1.0	6" high, acc		std opt		
Implementation	and 6MB L2 cach Processor in LGA						1 1		high, acc	-	. ,	eader)	
Memory	2GB or 4GB std, non-parity, dual-c <i>Italics:</i> stand <i>Non-italics:</i> stand	hannel capabl lard memory ir	e, four 2 n two so	:40-pin E ckets; tv	DIMM so vo socke	ckets; ts available	Slot 2	: Low Profi ness black " W X 14.0	le, PCI Exp le, 32-bit P c color; met " D X 3.9" 55mm D X	CI 2.3 al case H	e		
Graphics	Intel Graphics M integrated graphic (up to 765MB [20] one analog VGA (supports single-l supports dual ind	cs in Q45, use GB models] or DB-15 connec ink DVI-D via (	s main r 1759MB tor, one cable 45	nemory 8 <i>[4GB n</i> Displayl	<i>nodels]</i> ), Port™ co		• Tool • Tool • Tool • Tool	nm W X 355mm D X 99mm H  lb (7.5 kg) in maximum configuration ess cover flips up and tilts backward on rear hin ess disk, optical drive removal ess adapter retention ess systemboard retention em floor stand for vertical orientation					hinges
SATA disk SATA controller SATA DVD±RW SATA cables eSATA port Diskette drive Media reader	250GB or 320GB Serial ATA, SATA Super Multi-Burne Two SATA cables One external SAT None None	3.0Gb/s, integ er DL DVD±RV (each 1-drop	rated in V SATA to device	ICH10E 1.5Gb/s	OO, RAID Drive	0 0/1 suppo	rt	•		hip (se lot (in r ensing cable ting th	rear for a ton® Micr also lock e cover r	ttachme oSaver s the co	ent of ® cable) over by
Chipset	Intel Q45 Expres Digital Office [ICH ethernet MAC, PC	H10DO] (SAÌA	3.0Gb/s	with RA	AID 0/1 s	support, PC	I Expres	s x1,	Power-on password     Administrator password     Hard disk password (user and master     Boot sequence control				
Front ports Rear ports Internal connector Rear audio ports	Line-in (stereo, 3.	al (9-pin), ethe nar conn (1 us 5mm), line-ou	rnet (Rued; one of the contract of the contrac	J-45), mo open for o, 3.5mm	onitor (V media r n), micro	GA DB-15, reader or 2 phone-in (s	DisplayF rear USE	Port), B ports)	Boot without Serial port Individual	t I/O co	ntrol		
Audio Speaker Ethernet Intel AMT Modem	High Definition (H One internal spea Gigabit ethernet of Intel Active Mana None	aker for busine on planar, Intel	ss audic 82567L	o ₋M, Wak			, DASH	_	Supports Th	ninkVar	ntage® te	chnolog	iies
Security chip	Winbond® WPCT	200 SafeKeep	er™ Trus	sted Plat	tform Mo	dule, TCG	1.2-com	pliant -					
Keyboard Mouse Power supply	Preferred Pro US Optical Wheel Mo 280 watts with va	ouse (USB con	nector),	400 dpi	i, black, l	Lenovo logo	)		REENGU/ RoHS-comp	oliant	d Warraı	- 41	
- Some: Genuir Profes  Preloaded appli  Rescue and R  Password Mar  ThinkVantage  ThinkVantage  Lenovo Online  Norton™ Interi (30 days of vir  Adobe® Reade  Adobe Flash®  Microsoft Offic purchase prod	ne Windows® 7 sional 32 ne Windows 7 sional 64 ications⁵ (only sor ecovery™ nager System Update Power Manager Toolbox Data Backup net Security 2011 us definitions) er® Player e 2010 preloaded; uct key to activate r® Business Edition	1GB 2GB 5000 1TB me listed) Disp Disp NVII More	PC3-85 GB SATA SATA 3 er Multi- layPort layPort OIA® Que access Guide ir	500 DDF 500 DDF A 3.0Gb/s D Burner I to Single to VGA I adro® 25 sories or	Disk (72℃ DL DVD± e-link DV Monitor ( 56MB N\ n O-M58	IM 7200 rpm) 00 rpm) ±RW SATA /I-D Cable Cable VS 290	45 43 45 Drive 41 45 57 43 iesguide	J5434 J5435 R1990 J7918 N5620 J7915 Y4393 R1765	<ul> <li>3-year (ThinkF</li> <li>4-year (ThinkF</li> <li>4-year (ThinkF</li> <li>4-year</li> </ul>	onal War Replay (with ted par coverainess corvice to the local part of the local pa	arranty Saceable I Ilmited (at the standard stan	Jnit (CRonsite solds) - 5 pm, uding honse tim options or respo or 41C919 Businese - 41C919 or respo -	nse plidays, ne) nse pligae) onse ga) ss Day ga) onse gb) onse

Name Type-model	Slot x bay	Processor	GHz C	ores Memory	SATA /8 disk	SATA optical	Graphi	Monito cs connect		ongle		preload	Global Educ	Avai date	
<b>M58p</b> 9965-ABU	4x4	Core 2 Duo E8400 Core 2 Quad Q9400 Core 2 Duo E8400	2.66	2 2GB 4 4GB 2 4GB	250GB <sup>2</sup> 320GB 320GB		GMA	VGA, [	DP N	lone lone lone	vPro	Pro 32 Pro 32 Pro 64	None	Jan 10 Jan 10 Mar 10	
	<ul><li>Th</li><li>Th</li></ul>	el Core 2 Processor ese small and mediu ese models have a 3 ese systems are Mic	ım busi -year liı	ness (SMB) nited warra	models a nty¹	re part of t	he US T	opSeller™			)				
and 6MB L2 cache or Intel Core 2 Quad Processor Q9400 with quad-core, Virtualization Technology, TXT, 1333MHz system bus, and 6MB L2 cache Implementation  • 6.9" W X • 175mm W • 24.2 lb (1) • Handle of • Toolless • Toolless								Business bla .9" W X 17 75mm W X							
Memory	2GB non-p	or <b>4GB std</b> , 16GB moarity, dual-channel os: standard mer	nax <sup>8</sup> , <b>P(</b> capable, nory in	four 240-pi two sockets	n DIMM s ; two sock	ockets; kets availab	le; o • T	oolless disl ptical drive oolless ada y ① 5.25",	remov apter re 1.6" hi	al tention gh, acc	cess,	std op	tical	0	
Graphics	Intel Graphics Media Accelerator 4500 (GMA 4500), integrated graphics in Q45, uses main memory (up to 765MB [2GB models] or 1759MB [4GB models]), one analog VGA DB-15 connector, one DisplayPort™ connector (supports single-link DVI-D via cable 45J7915), HDCP, DirectX® 10, supports dual independent display							y ② 5.25", y ③ 3.5", y ④ 3.5", ot 1: half-ler ot 2: half-ler	1.6" hi 1" high 1" high ngth,ful ngth,ful	gh, acc n, acc n, no Il-heigh Il-heigh	cess, cess, acces t, PCI t, PCI t, 32-I	s, std dis le 2.0 x16 le x1 bit PCl 2.	6 (75w r .3		
SATA disk SATA controller SATA DVD±RW SATA cables eSATA port Diskette drive Media reader	Seria Supe Two	)	, integra /D±RW -drop to	ated in ICH1 SATA 1.5GI device), thr	0DO, RA o/s Drive	ID 0/1 supp	oort		• Sec • On ent - P	curity clean country c	Set hip (set to sect tem to loop (	ecurity ee inform ure both of fixed obj in rear for	ation or cover ar ject: r opt pa	nd <sup>'</sup> dlock)	
Chipset	Intel Digita	Q45 Express Chips al Office [ICH10DO] rnet MAC, PCI 2.3, U	(SAÌA 3	.0Gb/s with	RAID 0/1	support, F	CI Exp		• Pov	ensingt ver-on ministra	ton® Ñ passw ator pa	licroSave	er® cable	e)	
	Six U moni Two I Line- High	USB 2.0, microphone ISB 2.0, serial (9-pin tor (VGA DB-15, Dis USB 2.0 planar conn in (stereo, 3.5mm), li Definition (HD) Audi internal speaker for b	), keybo playPor (1 useo ne-out o, Analo	ard (PS/2), t) d; one open stereo, 3.5r g Devices A	mouse (F for media nm), micr	PS/2), ether reader or ophone-in	net (Rí. 2 rear l	J-45), JSB ports)	Boo     Boo     Sei	ot sequ ot witho rial port	ence out dis t I/O c	control kette, key	yboard	·	
Ethernet Intel AMT Modem	Giga Intel None	bit ethernet on plana Active Management	r, Intel 8 Technol	32567LM, W ogy (iAMT)								ntage® te	chnolog	gies	
Security chip Keyboard Mouse Power supply	Prefe	ond® WPCT200 Safe erred Pro USB Keybo cal Wheel Mouse (US	ard (US BB conn	B connecto ector), black	r), 104-ke k, Lenovo	ey, black, Le logo	enovo®				Limite	ed Warra	nty¹		
Preloaded opera - Some: Genuin Profess - Some: Genuin Profess	ating ne Wir sional ecove ager Syste Power Toolbo Data net Se us defer Player e 201 uct ker Bus	ndows® 7 32 ndows 7 64 nss (only some listed ry™ m Update r Manager ox Backup ccurity 2011 initions) r 0 preloaded; by to activate einess Edition	Acce 1GB I 2GB I 500G 1TB S Supel Blu-ra Displa NVID NVID More Acc G	ssories PC3-8500 D PC3-8500 D PC3-8500 D B SATA 3.00 Multi-Burner y™ Burner s yPort to VG A® Quadro A Quadro A Quadro accessories suide in pdf accessories	DR3 UDI DR3 UDI Gb/s Disk S Disk (7: er DL DVI SATA 1.50 agle-link E A Monito 256MB N 56MB N 6 on O-M5	MM MM (7200 rpm) D±RW SAT, 3b/s Drive VI-D Cable r Cable VS 290 /S 295 58 sheet om/access	) A Drive	45K1675 45J7915 57Y4393 43R1765 45K1669	Property in the control of the contr	ternations ternations to the control of the control	onal Wer Replay (with ted partice) incesservice le local LOR 2 Plus partice le local LOR 2 Plus partice parti	nd labor /arranty 5 laceable laceable h limited h limited arts³, 8 an arage excl day resp upgrade ations): 7 ax5, 4 hot part numbe ax5, Next art numbe ax5, 4 hot art numbe ax7, 4 hart numbe ax7, 4 hart numbe ax8, 4 hot art numbe ax8, 5 hot	Unit (CI onsite s onsite s on - 5 pm uding h onse tir options ur responder 41C91 guar responder 41C91 ur responder 41C91	RU) service , olidays ne) s onse 9192) oonse 93) ss Day 94) onse 95) oonse	

#### ThinkCentre® M58, M58p Accessories

## Partial list of accessories supported on ThinkCentre M58 and

#### Memory

Eco Ultra Small 8820/7359/7637/9961/7479/6136 use notebook

1GB PC3-8500 DDR3 Low-Halogen SODIMM 55Y3706 ann 06/23/09 1GB PC3-8500 DDR3 L-H SODIMM (25-Pack) 57Y4385 ann 06/23/09 2GB PC3-8500 DDR3 Low-Halogen SODIMM 55Y3707 ann 06/23/09 2GB PC3-8500 DDR3 L-H SODIMM (25-Pack) 57Y4386 ann 06/23/09

Small 8910/7360/6258/7638/9964/7483/7220/6137/6234, and Tower 9960/7373/6239/9965/7484/7188/6138/6209/3063/3285/9728/ 7639 use desktop memory:

1GB PC3-8500 DDR3 UDIMM	45J5434	ann 11/18/08
1GB PC3-8500 DDR3 UDIMM (25-Pack)	57Y4421	ann 11/10/09
2GB PC3-8500 DDR3 UDIMM `	45J5435	ann 11/18/08
2GB PC3-8500 DDR3 UDIMM (25-Pack)	57Y4422	ann 11/10/09

More information at

www.lenovo.com/support/desktopmemorycompatibility

#### Optical

DVD-ROM DL SATA 1.5Gb/s 16X-48X Max4 41N5618 ann 09/26/06 Super Multi-Burner DL DVD±RW SATA Drive 41N5620 ann 09/26/06

Tower 9960/7373/6239/9965/7484/7188/6138/6209/3063/3285/9728/ 7639 support: Blu-ray™ Burner SATA 1.5Gb/s Drive 45K1675 ann 03/31/09

Storage and removable storage

250GB SATA 3.0Gb/s Disk (7200 rpm) 41N3015 ann 01/24/06 500GB SATA 3.0Gb/s Disk (7200 rpm) 43R1990 ann 11/06/07 1TB SATA 3.0Gb/s Disk (7200 rpm) 45J7918 ann 08/19/08 USB 2.0 Portable 320GB Hard Disk 45K1689 ann 03/17/09

USB 2.0 Portable 500GB Hard Disk 45K1690 ann 05/26/09 USB 2.0 Portable Secure 160GB Hard Disk 43R2018 ann 11/18/08 USB 2.0 Portable Secure 320GB Hard Disk 43R2019 ann 11/18/08 eSATA/USB 2.0 Secure 500GB Hard Drive 57Y4400 ann 01/07/10 USB 2.0 Portable DVD Burner 43N3264 ann 01/05/10

#### Graphics

Small 8910/7360/6258/7638/9964/7483/7220/6137/6234 support Low Profile:

ADD2 DVI-D Monitor Connection (HDCP) 43R1985 ann 11/06/07 NVIDIA® Quadro® 256MB NVS 290 (2-DVI or 2-VGA via DMS59 dongles) NVIDIA GeForce® 310 512MB DMS59 43R1765 ann 12/18/07 (2-DVI or 2-VGA via DMS59 dongles) 57Y4167 ann 03/02/10

Tower 9960/7373/6239/9965/7484/7188/6138/6209/3063/3285/9728/ 7639 support 75 watts max:

ADD2 DVI-D Monitor Connection (HDCP) 43R1985 ann 11/06/07 NVIDIA Quadro 256MB NVS 290 43R1765 ann 12/18/07 NVIDIA Quadro 256MB NVS 295 (2-DP) 45K1669 ann 04/21/09 NVIDIA GeForce 310 512MB DMS59 57Y4167 ann 03/02/10

More information at www.lenovo.com/support/graphiccards

#### Keyboard

Preferred Pro USB Keyboard 73P5220 ann 06/21/05 Preferred Pro Full Size PS/2 Keyboard 31P7415 ann 06/04/02 Enhanced Performance USB Keyboard 73P2620 ann 03/23/04 Ultraslim Wireless Keyboard and Mouse<sup>52</sup> 57Y4700 ann 09/15/09 Lenovo® USB Fingerprint Keyboard 73P4730 ann 02/22/05 Lenovo USB Smartcard Keyboard 51J0155 ann 03/24/09 <sup>52</sup> Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

#### Mouse

Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo ScrollPoint® Mouse(ÚSB, Optical)	31P7405	ann 08/27/02
Lenovo Laser Mouse (USB)		ann 01/23/07
Lenovo Wireless Laser Mouse - Black <sup>52</sup>	45K1696	ann 11/25/08
Lenovo Wireless Laser Mouse - Red/Black <sup>52</sup>	51J0198	ann 11/25/08

More information at www.lenovo.com/support/mice

#### Multimedia

ThinkPad® In-Ear Headphones60 57Y4488 ann 01/07/10 60 Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.

#### Security

Kensington® MicroSaver® Cable Lock<sup>56</sup> Kensington Twin Head Cable Lock<sup>56</sup> 73P2582 ann 12/29/03 45K1620 ann 09/30/08 Lenovo Security Cable Lock 57Y4303 ann 08/24/10 USB Gemplus GemPC Smart Card Reader 41N3040 ann 02/21/06 Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

#### **Mounting Device**

Eco Ultra Small 8820/7359/7637/9961/7479/6136 support under desk mounting device:

ThinkCentre Ultra Small Under Desk Mount 40Y8625 ann 09/06/05

#### **Monitors**

Lenovo L2230x Wide 21.5" Monitor	5453HB1 ann 06/10/10
ThinkVision® L1711p 17" Monitor	5047HB2 ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1 ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6 ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6 ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6 ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6 ann 10/20/09
ThinkVision L2321x Wide 23" Monitor	4014HB6 ann 06/10/10
ThinkVision L2440p Wide 24" Monitor	4420HB2 ann 09/17/08

More information at www.lenovo.com/thinkvision

#### Monitor Accessories<sup>46</sup>

Eco Ultra Small 8820/7359/7637/9961/7479/6136 support: Lenovo Vertical PC and Monitor Stand II 41R4474 ann 01/27/09

Lenovo USB-to-DVI Monitor Adapter 45K5296 ann 05/12/09 DisplayPort™ to Single-link DVI-D Cable
DisplayPort to VGA Monitor Cable 45J7915 ann 08/05/08 57Y4393 ann 08/04/09 ThinkVision USB Soundbar 40Y7616 ann 08/23/05 ThinkVision Soundbar 45K1263 ann 09/16/08 Kensington MicroSaver Cable Lock56 73P2582 ann 12/29/03 Kensington Twin Head Cable Lock<sup>56</sup> 45K1620 ann 09/30/08 57Y4303 ann 08/24/10 Lenovo Security Cable Lock 57Y4352 ann 07/06/10 ThinkCentre Extend Arm <sup>46</sup>Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on desktop accessories, please visit: www.lenovo.com/support/accessories www.lenovo.com/support/desktopaccessories www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesquide





Lenovo ThinkCentre M70e Small and Lenovo ThinkCentre M70e Tower





Lenovo ThinkCentre M70e Small with optional PS/2 keyboard and mouse ports





Lenovo ThinkCentre M70e Tower with optional PS/2 keyboard and mouse ports



Lenovo ThinkCentre M70e Tower with Lenovo ThinkVision monitor



Lenovo ThinkCentre M70e Small with Lenovo ThinkVision monitor



Lenovo ThinkCentre M70e Tower

Type-model	Slot x bay	Processor	GHz	L2 cache	Cores	Memory <sup>8</sup>	SATA disk	SATA optical	Graphics	Win7 preload	Global Educ	Avail date
0809-C5U	4x3	Pentium E5500	2.80	2MB	2	2GB	320GB <sup>2</sup>	DVD±RW	GMA	Pro 32	None	Aug 10
0809-B3U	4x3	Core 2 Duo E7500	2.93	3MB	2	3GB	320GB	DVD±RW	GMA	Pro 32	None	Aug 10
0809-C6U	4x3	Core 2 Duo E8400	3.00	6MB	2	4GB	500GB	DVD±RW	GMA	Pro 64	None	Aug 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Essential business features, exceptional value Intel® Pentium® Processor E5500 with dual-core, 800MHz system bus, and 2MB L2 cache or Intel Core™ 2 Duo Processor E7500 with dual-core, 1066MHz system bus, and 3MB L2 cache or Intel Core 2 Duo Processor E8400 with dual-core, 1333MHz system bus, and 6MB L2 cache Processor in LGA775 socket	Bay ② 3.5", Bay ③ 1.5",	disk optical  1.6" high, access, std optical 1" high, no access, std disk .35" high, access, opt reader* iilable on models with media reader installed
Memory	2GB, 3GB, or 4GB std, 4GB max <sup>8</sup> , PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 240-pin DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets avail; <i>Non-italics:</i> standard memory in one socket; one socket available	Slot 2: Low Pr	rofile, PCI Express x16 (40w max) rofile, PCI Express x1 rofile, 32-bit PCI 2.3 rofile, 32-bit PCI 2.3
Graphics	Intel Graphics Media Accelerator X4500 (GMA X4500), integrated graphics in G41, uses main memory (up to 765MB [2GB models], 1277MB [3GB models], or 1759MB [4GB models]), one analog VGA DB-15 connector, DirectX® 10, supports dual independent display with optional ADD2 adapter	<ul> <li>Business bla</li> <li>13.2" W X 1</li> <li>335mm W X</li> <li>14.5 lb (6.6</li> <li>Highlighted</li> </ul>	ack color; metal case 5.0" D X 3.9" H ( 382mm D X 99mm H kg) in maximum configuration optical drive button for easy access r stand for vertical orientation
SATA disk SATA controller SATA DVD±RW SATA cables eSATA port Diskette drive Media reader	<b>320GB</b> or <b>500GB</b> , SATA 3.0Gb/s 7200 rpm, vibration dampening Serial ATA, SATA 3.0Gb/s, integrated in ICH7 Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive Two SATA cables (each 1-drop to device), three SATA connectors or None None None	1	Security     One lock to secure both cover and entire system to fixed object:     Padlock loop (in rear for opt padlock)     Security slot (in rear for optional Kensington® Microsaver® cable)
Chipset	Intel G41 Express Chipset (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, PCI 2.3 LPC bus)	B, USB,	Power-on password     Administrator password     Hard disk password     Boot sequence control
Front ports Rear ports Rear audio ports Audio Speaker IEEE 1394 Ethernet	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5 Four USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15) Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereon) High Definition (HD) Audio, Realtek® ALC662 codec One internal speaker for business audio None Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN®	) ´	Boot sequence control     Boot without keyboard, mouse     Serial port I/O control     USB port disablement
Intel AMT Modem Security chip	None None None		Supports ThinkVantage® technologies
Keyboard Mouse	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenco Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo		GREENGUARD® certified RoHS-compliant
Power supply	240 watts, autosensing, active Power Factor Correction		Limited Warranty <sup>1</sup>
Preloaded oper	rating system <sup>20</sup> Accessories		

#### reloaded operating system<sup>a</sup>

- Some: Genuine Windows® 7 Professional 32
- Some: Genuine Windows 7 Professional 64

#### Preloaded applications<sup>5</sup> (all OSes; only some listed)

- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions) Adobe® Reader®
- Adobe Flash® Player Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
  • Corel® Burn.Now™ (DVD±RW)
  • Corel DVD MovieFactory® (DVD±RW)

#### Accessories

1GB PC3-8500 DDR3 UDIMM 45J5434 2GB PC3-8500 DDR3 UDIMM 45J5435 Super Multi-Burner DL DVD±RW SATA Drive 41N5620 DisplayPort™ to Single-link DVI-D Cable DisplayPort to VGA Monitor Cable 45J7915 57Y4393 ADD2 DVI-D Monitor Connection (HDCP) 43R1985 NVIDIA® GeForce® 310 512MB (DP, VGA) 57Y4397 NVIDIA Quadro® 512MB FX 380 LP (DP,DVI) 57Y4396 More accessories on O-M70E sheet

Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories

- ✓ International Warranty Service<sup>9</sup>
   ✓ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts3, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)
- Onsite service upgrade options (in eligible locations):
  - 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192) 3-year LOR 24x7, 4 hour response
  - (ThinkPlus part number 41C9193) 4-year LOR 9x5, Next Business Day
  - (ThinkPlus part number 41C9194) 4-year LOR 9x5, 4 hour response
  - (ThinkPlus part number 41C9195) 4-year LOR 24x7, 4 hour response
  - (ThinkPlus part number 41C9196)
- ThinkPlus services at lenovo.com/thinkplus/warranty
- Post warranty maintenance services available
- 24 hour x 7 day14 toll-free support during the warranty period<sup>1</sup> via 800-426-7378

Type-model	Slot x bay	Processor	GHz	L2 cache	Cores	Memory <sup>8</sup>	SATA disk	2nd Disk Bay	SATA optical	Graphics	Win7 preload	Global Educ	Avail date
0806-C1U	4x3	Pentium E5500	2.80	2MB	2	2GB	320GB <sup>2</sup>	None	DVD±RW	GMA	Pro 32	None	Aug 10
0806-B3U	4x3	Core 2 Duo E7500	2.93	3MB	2	3GB	320GB	None	DVD±RW	GMA	Pro 32	None	Aug 10
0806-C5U	4x3	Core 2 Duo E8400	3.00	6MB	2	4GB	500GB	None	DVD±RW	GMA	Pro 64	None	Aug 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Essential business features, exceptional value Intel® Pentium® Processor E5500 with dual-core, 800MHz system bus, and 2MB L2 cache or Intel Core™ 2 Duo Processor E7500 with dual-core, 1066MHz system bus, and 3MB L2 cache or Intel Core 2 Duo Processor E8400 with dual-core, 1333MHz system bus, and 6MB L2 cache Processor in LGA775 socket	Tower  • Business black color; metal case • 6.3" W X 16.6" D X 15.3" H • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in max configuration • Handle on top front • Highlighted optical drive button for easy access			
Memory	2GB, 3GB, or 4GB std, 4GB max <sup>s</sup> , PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 240-pin DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets avail; <i>Non-italics:</i> standard memory in one socket; one socket available	Bay ① 5.25",	1.6" high, access, std o	pptical	
Graphics	Intel Graphics Media Accelerator X4500 (GMA X4500), integrated graphics in G41, uses main memory (up to 765MB [2GB models], 1277MB [3GB models], or 1759MB [4GB models]), one analog VGA DB-15 connector, DirectX® 10, supports dual independent display with optional ADD2 adapter	Bay @ 1.5", .35" high, access, opt reader* Bay @ 3.5", 1" high, no access, std disk * bay only available on models with media reader inst Slot 1: half-length,full-height, PCI Express x16 (60w r Slot 2: half-length,full-height, PCI Express x1 Slot 3: half-length,full-height, 32-bit PCI 2.3 Slot 4: half-length,full-height, 32-bit PCI 2.3			
SATA disk  SATA controller SATA DVD±RW SATA cables eSATA port Diskette drive Media reader	320GB or 500GB, SATA 3.0Gb/s 7200 rpm, vibration dampening mounts Serial ATA, SATA 3.0Gb/s, integrated in ICH7 Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive Two SATA cables (each 1-drop to device), three SATA connectors of None None None None	Security  One lock to secure both cover and entire system to fixed object: Padlock loop (in rear for opt padlock) Security slot (in rear for optional Kensington® Microsaver® cable) Power-on password			
Chipset	Intel G41 Express Chipset (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, PCI 2.3 LPC bus)	3, USB,	Administrator password     Hard disk password     Boot sequence control		
Front ports Rear ports Rear audio ports Audio Speaker IEEE 1394	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5 Four USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15 Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stere High Definition (HD) Audio, Realtek® ALC662 codec One internal speaker for business audio None	Boot without keyboard, mouse     Serial port I/O control     USB port disablement			
Ethernet Intel AMT Modem	Gigabit ethernet on planar, Marvell® 88E8057, Wake on LAN® None None		Supports ThinkVantage®	technologies	
Security chip Keyboard	None Preferred Pro USB Keyboard (USB connector), 104-key, black, Lend	avo® logo	GREENGUARD® certifie RoHS-compliant	d	
Mouse Power supply	Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo 280 watts with variable speed fan, manual switch		Limited War	•	

#### Preloaded operating system<sup>20</sup>

- Some: Genuine Windows® 7 Professional 32
- Some: Genuine Windows 7 Professional 64

#### Preloaded applications<sup>5</sup> (all OSes; only some listed)

- Rescue and Recovery<sup>™</sup>
- Password Manager ThinkVantage System Update ThinkVantage Power Manager
- ThinkVantage Toolbox
- ThinkVantage Iooipox
   Norton™ Internet Security 2011 (30 days of virus definitions)
   Adobe® Reader®
   Adobe Flash® Player
   Skype™ for Windows
   Microsoft Office 2010 preloaded

- Microsoft Office 2010 preloaded; purchase product key to activate Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

#### Accessories

IGB PC3-8500 DDR3 UDIMM 45J5434
2GB PC3-8500 DDR3 UDIMM 45J5435
Super Multi-Burner DL DVD±RW SATA Drive 41N5620
DisplayPort™ to Single-link DVI-D Cable 45J7915
DisplayPort to VGA Monitor Cable 57Y4393 43R1985 ADD2 DVI-D Monitor Connection (HDCP) NVIDIA® GeForce® 310 512MB (DP, VGA) 57Y4397 More accessories on O-M70E sheet

Acc Guide in pdf lenovo.com/accessoriesquide Other accessories at lenovo.com/accessories

- 3-year parts and labor
- International Warranty Service<sup>9</sup>
  Customer Replaceable Unit (CRU)
- parts only (with limited onsite service for selected parts3, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)
- Onsite service upgrade options (in eligible locations):
  - 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)
  - 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193) 4-year LOR 9x5, Next Business Day
  - (ThinkPlus part number 41C9194) 4-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9195)
  - 4-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9196)
- ThinkPlus services at lenovo.com/thinkplus/warranty
- Post warranty maintenance services available
- 24 hour x 7 day14 toll-free support during the warranty period<sup>1</sup> via 800-426-7378

#### ThinkCentre® M70e Accessories

#### Partial list of accessories supported on ThinkCentre M70e

М	en	nn	rv
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1GB PC3-8500 DDR3 UDIMM	45J5434 ann 11/18/08
1GB PC3-8500 DDR3 UDIMM (25-Pack)	) 57Y4421 <i>ann 11/10/09</i>
2GB PC3-8500 DDR3 UDIMM `	45J5435 <i>ann 11/18/08</i>
2GB PC3-8500 DDR3 UDIMM (25-Pack)	) 57Y4422 ann 11/10/09

More information at

www.lenovo.com/support/desktopmemorycompatibility

#### Ontical

#### Storage and removable storage

250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015 ann 01/24/06
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990 ann 11/06/07
USB 2.0 Portable 320GB Hard Disk USB 2.0 Portable 500GB Hard Disk USB 2.0 Portable Secure 160GB Hard Disk USB 2.0 Portable Secure 320GB Hard Disk eSATA/USB 2.0 Secure 500GB Hard Drive <sup>53</sup> USB 2.0 Portable DVD Burner <sup>53</sup> USB-only attach.	45K1689 ann 03/17/09 45K1690 ann 05/26/09 43R2018 ann 11/18/08 43R2019 ann 11/18/08 57Y4400 ann 01/07/10 43N3264 ann 01/05/10

#### Graphics

Small 0809/0822/0830/0833/0843 support Low Profile:

DisplayPort™ to Single-link DVI-D Cable⁵	45J7915 ann 08/05/08
DisplayPort to VGA Monitor Cable50	57Y4393 ann 08/04/09
ADD2 DVI-D Monitor Connection (HDCP)	43R1985 ann 11/06/07
NVIDIA® Quadro® 512MB FX 380 LP	
(DP, DVI with a DVI to VGA converter)	57Y4396 ann 02/02/10
NVIDIA GeForce® 310 512MB (DP, VGA)	57Y4397 ann 02/02/10
NVIDIA GeForce 310 512MB DMS59	

(2-DVI or 2-VGA via DMS59 dongles) 57Y4167 ann 03/02/10

Tower 0806/0829/0832/0842 support:
DisplayPort to Single-link DVI-D Cable<sup>50</sup>
DisplayPort to VGA Monitor Cable<sup>50</sup>
ADD2 DVI-D Monitor Connection (HDCP) 45J7915 ann 08/05/08 57Y4393 ann 08/04/09 43R1985 ann 11/06/07 57Y4397 ann 02/02/10 57Y4167 ann 03/02/10 NVIDIA GeForce 310 512MB (DP, VGA) NVIDIA GeForce 310 512MB DMS59 50 Attaches to the Think Centre compatible Display Port graphics card.

More information at www.lenovo.com/support/graphiccards

#### Koyboard

Reyboard	
Preferred Pro USB Keyboard	73P5220 ann 06/21/05
Preferred Pro Full Size PS/2 Keyboard	31P7415 ann 06/04/02
Enhanced Performance USB Keyboard	73P2620 ann 03/23/04
Ultraslim Wireless Keyboard and Mouse <sup>52</sup>	57Y4700 ann 09/15/09
ThinkPad USB Keyboard with TrackPoint	55Y9003 ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730 ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155 ann 03/24/09
52 Wireless via 2 4GHz technology using a micro	-size USB receiver

More information at www.lenovo.com/support/keyboards

### Mouse

Lenovo Optical Mouse (USB)	06P4069 <i>ann 05/21/03</i>
ThinkPad® USB Laser Mouse	57Y4635 ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405 ann 08/27/02
Lenovo Laser Mouse (USB)	41U3074 ann 01/23/07
Lenovo Wireless Laser Mouse - Black <sup>52</sup>	45K1696 ann 11/25/08
Lenovo Wireless Laser Mouse - Red/Black <sup>52</sup>	51J0198 <i>ann 11/25/08</i>

More information at www.lenovo.com/support/mice

#### Multimedia

ThinkPad In-Ear Headphones<sup>60</sup> 57Y4488 ann 01/07/10 60 Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.

USB 2.0 Lenovo Modem 43R1814 ann 02/26/08

Security Kensington® MicroSaver® Cable Lock<sup>56</sup> 73P2582 ann 12/29/03 Kensington's Microsaver's Cable Lock\*\*

Kensington Twin Head Cable Lock\*\*

Kensington Twin Head Cable Lock\*\*

45K1620 ann 09/30/08

Lenovo Security Cable Lock

57Y4303 ann 08/24/10

Seamplus GemPC Smart Card Reader 41N3040 ann 02/21/06

Seattaching to any form factor not only secures the Think Centre to the work area but it also prevents users from opening the chassis the work area, but it also prevents users from opening the chassis itself.

#### **Monitors**

Lenovo D186 Wide 18.5" Monitor	2580AB1	ann 01/12/10
Lenovo L2230x Wide 21.5" Monitor	5453HB1	ann 06/10/10
ThinkVision® L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann 10/20/09
ThinkVision L2321x Wide 23" Monitor	4014HB6	ann 06/10/10
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann 09/17/08
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More information at www.lenovo.com/thinkvision

#### Monitor Accessories<sup>46</sup>

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09			
ThinkVision USB Soundbar	40Y7616	ann 08/23/05			
ThinkVision Soundbar		ann 09/16/08			
Kensington MicroSaver Cable Lock <sup>56</sup>	73P2582	ann 12/29/03			
Kensington Twin Head Cable Lock <sup>56</sup>	45K1620	ann 09/30/08			
Lenovo Security Cable Lock	57Y4303	ann 08/24/10			
ThinkCentre Extend Arm	57Y4352	ann 07/06/10			
<sup>46</sup> Compatible on selected Lenovo and ThinkVision monitors.					

More information at www.lenovo.com/support/monitoraccessories

For more information on desktop accessories, please visit:

www.lenovo.com/support/accessories www.lenovo.com/support/desktopaccessories www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide





Lenovo ThinkCentre M75e Small and Lenovo ThinkCentre M75e Tower





Lenovo ThinkCentre M75e Small





Lenovo ThinkCentre M75e Tower



Lenovo ThinkCentre M75e Tower with Lenovo ThinkVision monitor



Lenovo ThinkCentre M75e Small with Lenovo ThinkVision monitor



Lenovo ThinkCentre M75e Tower

Type-model	Slot x bay	Processor	GHz	Memory	SATA disk	SATA optical	Media reader	Integrated graphics	Monitor connectors	Win7 preload	Global Educ	Avail date
4163-B2U	4x3	Sempron 145	2.80	1GB	250GB <sup>2</sup>	DVD	None	3000	VGA. DVI-D	Prem 32	None	Oct 10

- This small and medium business (SMB) model is part of the US TopSeller™ Program
   This model has a 1-year limited warranty¹
   This system is Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Essential business feature AMD® Sempron™ Procesintegrated 1066MHz DDR Processor in Socket AM3		Small		disk optical		
Memory	1GB std, 16GB max <sup>8</sup> , UD four 240-pin DIMM socket Non-italics: standard mer * System automatically cld DDR3 memory controller	Bay ② 3.5", Bay ③ 1.5", * bay only ava	Bay ① 5.25", 1.6" high, access, std optical Bay ② 3.5", 1" high, no access, std disk Bay ③ 1.5", .35" high, access, opt reader* * bay only available on models with media reader installed. Slot 1: Low Profile, PCIe 2.0 x16 (40w max)				
Graphics	nics ATI™ Radeon™ 3000, integrated in chipset, uses main memory (up to 256MB), one analog VGA DB-15 connector.			Slot 2: Low Profile, PCle 2.0 x1 Slot 3: Low Profile, PCle 2.0 x1 Slot 4: Low Profile, 32-bit PCl 2.3 • Business black color; metal case • 13.2" W X 15.0" D X 3.9" H • 335mm W X 382mm D X 99mm H			
SATA disk SATA controller SATA DVD SATA cables	250GB, SATA 3.0Gb/s 72 Serial ATA, SATA 3.0Gb/s DVD-ROM DL SATA 1.5G Two SATA cables (each 1-	00 rpm, vibration dampening mounts , integrated in SB710	<ul><li>14.9 lb (6.8</li><li>Highlighted</li></ul>	<ul> <li>14.9 lb (6.8 kg) in maximum configuration</li> <li>Highlighted optical drive button for easy access</li> <li>System floor stand for vertical orientation</li> </ul>			
eSATA port Diskette drive Media reader	None None None				Security ck to secure both cover and ystem to fixed object:		
Chipset	AMD 760G Chipset with HyperTransport 3.0 and PCI Express® 2.0 support; SB710 south bridge / ITE Tech® IT8720 Super I/O			Padlock loop (in rear for opt padlock)     Security slot (in rear for optional Kensington® Microsaver® cable)     Power-on password			
Front ports Rear ports Rear audio ports Internal connector Audio Speaker IEEE 1394 Ethernet Modem	Four USB 2.0, serial (9-pi ethernet (RJ-45), monitor Line-in (stereo, 3.5mm), li Two USB 2.0 planar conn High Definition (HD) Audio One internal speaker for b None Gigabit ethernet on plana None	ne-out (stereo, 3.5mm), microphone (stere (1 used; one open for media reader or 2 r o, Realtek® ALC662 codec rusiness audio r, Marvell® 88E8057, Wake on LAN®	eo, 3.5mm) ear USB ports)	Adminis     Hard di     Boot se     Boot wi     Serial p	strator password sk password quence control thout keyboard, mouse port I/O control ort disablement		
Security chip Keyboard Mouse Power supply	Preferred Pro USB Keybo Optical Wheel Mouse (US	eKeeper™ Trusted Platform Module, TCG ard (USB connector), 104-key, black, Lend B connector), 400 dpi, black, Lenovo logo ctive Power Factor Correction	ovo® logo	<u> </u>	ThinkVantage® technologies GUARD® certified mpliant		
Preloaded appli  Rescue and R  Password Mar  ThinkVantage  ThinkVantage  ThinkVantage  Norton™ Interr  (30 days of vir  Adobe® Reade  Skype™ for Wi  Microsoft Office	ows® 7 Home Premium 32 ications⁵ (only some listed ecovery™ nager System Update Power Manager Toolbox net Security 2011 us definitions)	Accessories  1GB PC3-10600 DDR3 UDIMM  2GB PC3-10600 DDR3 UDIMM  Super Multi-Burner DL DVD±RW SATA DESPLAY DES	45J7915 57Y4396 ) 57Y4397 /GA) 57Y4167	□ Intern     □ Custo     parts     for se     Mon -     next b     □ Onsite     (in eligi     • 1-ye     (Thi     • 2-ye     (Thi     • 3-ye     (Thi     • 3-ye     (Thi     □ Think     lenove     □ Post v     service     □ 24 hod     during	Limited Warranty¹  r parts and labor ational Warranty Service⁰ mer Replaceable Unit (CRU) only (with limited onsite service lected parts³, 8 am - 5 pm, Fri coverage excluding holidays, usiness day response time) be service upgrade options gible locations):² ear LOR 9x5, 4 hour response nkPlus™ part number 41C9189) ear LOR 9x5, Next Business Day nkPlus part number 41C9187) ear LOR 9x5, Next Business Day nkPlus part number 41C9188) ear LOR 9x5, Next Business Day nkPlus part number 41C9188) ear LOR 9x5, 4 hour response nkPlus part number 41C9188) ear LOR 9x5, 4 hour response nkPlus part number 41C9191) Plus services at D.com/thinkplus/warranty varranty maintenance tes available ur x 7 day¹⁴ toll-free support g the warranty period¹ 0-426-7378		

Type-model	Slot x	Processor	GHz	Memory <sup>8</sup>	SATA disk	SATA optical	Med read	ia Integra er graph		Monitor connectors	Win7 preload	Global Educ	Avail date	
5042-A5U 5042-A6U 5042-A7U	4x3 4x3 4x3	Athlon II X2 B22 Phenom II X2 B53 Athlon II X4 640	2.80 2.80 3.00	2GB 3GB 4GB	320GB <sup>2</sup> 320GB 500GB	DVD±RW DVD±RW DVD±RW	Nor Nor Nor	ne 300	00	VGA, DVI-D VGA, DVI-D VGA, DVI-D	Pro 32 Pro 32 Pro 64	None None None	Oct 10 Oct 10 Oct 10	
<ul> <li>These small and medium business (SMB) models are part of the US TopSell</li> <li>These models have a 3-year limited warranty</li> <li>These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)</li> </ul>								ller™ l	Program					
Positioning Processor		Essential business fea AMD® Athlon™ II X2 Fintegrated 1066MHz Dand 2MB L2 cache (1MAMD Phenom™ II X2 integrated 1066MHz Dand 1MB L2 cache (51AMD Athlon II X4 Prointegrated 1333MHz and 2MB L2 cache (51Processor in Socket A	Process DR3 me MB per c Process DR3 me 2KB per cessor DR3 me 2KB per 2KB per	or B22 with the core or B53 with the core or B53 with the core or core	h dual-co roller, th dual-c roller, d 6MB sh uad-core	ore, ared L3 cach	e or	Bay ② 3. Bay ③ 1. * bay onl Slot 1: Lo	3.5", 1 .5", ly avai ow Pro	I.6" high, acc " high, no a 35" high, acc lable on mod ofile, PCle 2.0	access, std ess, opt els with me 0 x16 (40w r	dia reader	rinstalled	
Memory		2GB, 3GB, or 4GB sto UDIMM, PC3-10600 13	1, 16GB 333MHz memory memory clocks	DDR3*, for in two soci in one soci	kets; two ket; three	sockets avai sockets ava	l; il	Slot 4: Lo  Busines  13.2" W  335mm  14.9 lb	ow Pro ss blac V X 15 n W X (6.8 k		.0 x1 PCI 2.3 tal case H			
Graphics		ATI™ Radeon™ 3000, memory (up to 256MB one DVI-D connector, I supports dual indepen supports up to 4 monit ATI Radeon discrete g	), one ar DirectX® dent disp ors with	nalog VĠA 10, ATI Av olay; optional d	DB-15 co ⁄ivo™, Su	onnector,	<i>1</i> ,	System	n floor	One lock to entire syst	tical orienta Secur	ity th cover a object:	ind	
SATA disk SATA control SATA DVD±F SATA cables eSATA port Diskette drive Media reade	ler RW	Serial ATA, SATA 3.0G Super Multi-Burner DL	TA 3.0Gb/s 7200 rpm, vibration dampening mounts Bb/s, integrated in SB710 L DVD±RW SATA 1.5Gb/s Drive ch 1-drop to device), four SATA connectors on planar						- Security slot (in rear for optional Kensington® Microsaver® cable)  - Power-on password  - Administrator password  - Hard disk password  - Boot sequence control  - Boot without keyboard, mouse  - Serial port I/O control  - USB port disablement					
Chipset		PCI Express® 2.0 supp	et with HyperTransport 3.0 and upport; e / ITE Tech® IT8720 Super I/O											
Front ports Rear ports Rear audio p Internal conn Audio Speaker IEEE 1394	orts ector	Two USB 2.0, microph Four USB 2.0, serial (Sethernet (RJ-45), moni Line-in (stereo, 3.5mm or USB 2.0 planar or High Definition (HD) Al One internal speaker for None	P-pin), ke itor (VGA ), line-ou onn (1 us udio, Re or busine	eyboard (PA DB-15, E at (stereo, sed; one o altek® ALC ess audio	S/2), mou VI-D) 3.5mm), I pen for m 0662 code	use (PS/2), microphone ( edia reader d ec	stere	o, 3.5mm)		Supports ThinkVantage® technologies  GREENGUARD® certified				
Ethernet Modem Security chip		Gigabit ethernet on pla None Winbond® WPCT210 S					CG 1	.2-complia	ant	RoHS-compliant  Limited Warranty¹				
Keyboard Mouse Power supply		Preferred Pro USB Ke Optical Wheel Mouse 240 watts, autosensing	USB co	nnector), 4	I00 dpi, b	lack, Lenovó		vo® logo		<ul> <li>3-year pa</li> <li>Internation</li> <li>Custome parts onl</li> </ul>	onal Warran	ty Service ble Unit (C	RU)	
- Some: GP - Some: GP - Some: GP - Preloaded some listed • Rescue ae • Password • ThinkVar • ThinkVar • ThinkVar • Norton™ (30 days • Adobe® F • Skype™ f • Microsoft purchase • Corel® Bu	Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64  Preloaded applications® (all OSes; only some listed) Rescue and Recovery™ Password Manager ThinkVantage System Update ThinkVantage Power Manager ThinkVantage Power Manager ThinkVantage Toolbox Norton™ Internet Security 2011 (30 days of virus definitions) Adobe® Reader® Skype™ for Windows Microsoft Office 2010 preloaded; purchase product key to activate Corel® Burn.Now™ (DVD±RW) Corel DVD MovieFactory® (DVD±RW)				390 6620 915 396 397	Mon - Fri next business of the second of the	le locations LOR 9x5, 4 Plus™ part nu LOR 24x7, 4 Plus part nun LOR 9x5, N. Plus part nun LOR 9x5, 4 Plus part nun LOR 24x7, 4 Plus part nun LOR 24x7, 4 Plus part nun s services a pm/thinkplus ranty maint available to 7 day¹⁴ toll te warranty	xcluding I isponse ti ide option p:7 hour resp imber 41C9 ext Busing iber 41C9 hour resp iber 41C9 I hour resp iber 41C9 I warranty enance	nolidays, me) as onse (9192) ponse 193) ess Day 194) onse 195) ponse					

Type-model	Slot x bay	Processor	GHz	Memory <sup>8</sup>	SATA disk	2nd Disk Bay	SATA optical	Media reader	Integrated graphics	Monitor connectors	Win7 preload	Global Educ	Avail date
4162-A3U	4x3	Sempron 145	2.80	1GB	250GB <sup>2</sup>	None	DVD	None	3000	VGA. DVI-D	Prem 32	None	Oct 10

- This small and medium business (SMB) model is part of the US TopSeller™ Program
   This model has a 1-year limited warranty¹
   This model has a 1-year limited warranty¹

	This model has a 1-year     This system is Microso	fillinied warranty ff® Office 2010 Product Key Ready (O10Pi	KR)				
Positioning Processor Implementation		ssor 145 with single-core, R3 memory controller, and 1MB L2 cache	• 6.3" W X 16	ack color; metal case .6" D X 15.3" H 422mm D X 388mm H			
Memory	four 240-pin DIMM socket Non-italics: standard me	MMM, PC3-10600 1333MHz DDR3*, is; mory in one socket; three sockets avail ocks down for processors with 1066MHz	<ul><li>21.2 lb (9.6</li><li>Handle on to</li></ul>	kg) in max configuration op front optical drive button for			
Graphics	memory (up to 256MB), o	with optional dual-head	Bay ② 1.5", Bay ③ 3.5", * bay only ava	1.6" high, access, std optical .35" high, access, opt reader* 1" high, no access, std disk iilable on models with media reader installed			
SATA disk SATA controller SATA DVD SATA cables eSATA port	ATA disk ATA controller ATA DVD ATA cables  250GB, SATA 3.0Gb/s 7200 rpm, vibration dampening mounts Serial ATA, SATA 3.0Gb/s, integrated in SB710 DVD-ROM DL SATA 1.5Gb/s 16-48X Max <sup>4</sup> Drive Two SATA cables (each 1-drop to device), four SATA connectors			Slot 1: half-length, full-height, PCle 2.0 x16 (60w max) Slot 2: half-length, full-height, PCle 2.0 x1 Slot 3: half-length, full-height, PCle 2.0 x1 Slot 4: half-length, full-height, 32-bit PCl 2.3			
Diskette drive Media reader	None None None			Security  One lock to secure both cover and			
Chipset	AMD 760G Chipset with HyperTransport 3.0 and PCI Express® 2.0 support; SB710 south bridge / ITE Tech® IT8720 Super I/O			entire system to fixed object: - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® Microsaver® cable)			
Front ports Rear ports  Rear audio ports Internal connector Audio Speaker IEEE 1394 Ethernet Modem Security chip	Four USB 2.0, serial (9-pi ethernet (RJ-45), monitor Line-in (stereo, 3.5mm), li Two USB 2.0 planar conn High Definition (HD) Audi One internal speaker for the None Gigabit ethernet on plana None	ne-out (stereo, 3.5mm), microphone (stere (1 used; one open for media reader or 2 r o, Realtek® ALC662 codec	eo, 3.5mm) ear USB ports)	Power-on password     Administrator password     Hard disk password     Boot sequence control     Boot without keyboard, mouse     Serial port I/O control     USB port disablement			
Keyboard Mouse Power supply		oard (USB connector), 104-key, black, Lend SB connector), 400 dpi, black, Lenovo logo beed fan, manual switch		Supports ThinkVantage® technologies  GREENGUARD® certified			
Preloaded appli  Rescue and R  Password Man  ThinkVantage  ThinkVantage  ThinkVantage  Norton™ Interr  (30 days of virr  Adobe® Reade  Skype™ for Wi  Microsoft Office	ows® 7 Home Premium 32 cations⁵ (only some listed ecovery™ lager System Update Power Manager Toolbox net Security 2011 us definitions)	Accessories  1GB PC3-10600 DDR3 UDIMM 2GB PC3-10600 DDR3 UDIMM DVD-ROM DL SATA 1.5Gb/s 16-48X Ma. DisplayPort™ to Single-link DVI-D Cable NVIDIA® GeForce® 310 512MB (DP, VGA NVIDIA GeForce 310 DMS59 (2-DVI, 2-V More accessories on O-M75E sheet Acc Guide in pdf lenovo.com/accessorie Other accessories at lenovo.com/acces	45J7915 A) 57Y4397 /GA) 57Y4167 esguide	Limited Warranty¹  2 1-year parts and labor  International Warranty Service³  Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)  Onsite service upgrade options (in eligible locations):²  1-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9189) 2-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9187) 2-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9190) 3-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9198) 3-year LOR 9x5, 4 hour response (ThinkPlus part number 41C9191)  ThinkPlus services at lenovo.com/thinkplus/warranty  Post warranty maintenance services available  24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378			

Type-model	Slot x bay	Processor	GHz	Memory <sup>8</sup>	SATA disk	2nd Disk Bay		Media reader	Integrated graphics	d Monitor connectors	Win7 preload	Global Educ	Avail date
5041-A1U 5041-A2U 5041-A3U	4x3 4x3 4x3	Athlon II X2 B22 Phenom II X2 B53 Athlon II X4 640	2.80 2.80 3.00	2GB 3GB 4GB	320GB <sup>2</sup> 320GB 500GB	None None None	DVD±RW DVD±RW DVD±RW	None	3000 3000 3000	VGA, DVI-D VGA, DVI-D VGA, DVI-D	Pro 32 Pro 32 Pro 64	None None None	Oct 10 Oct 10 Oct 10
		<ul> <li>These small and n</li> <li>These models hav</li> <li>These systems are</li> </ul>	e a 3-y	ear limite	d warra	nty¹				Program			
Positioning Processor	AMD® Athlon™ II X2 Processor B22 with dual-core, integrated 1066 MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) or  AMD Phenom™ II X2 Processor B53 with dual-core, integrated 1066 MHz DDR3 memory controller, and 1MB L2 cache (512KB per core), and 6MB shared L3 cache or AMD Athlon II X4 Processor 640 with quad-core, integrated 1333 MHz DDR3 memory controller, and 2MB L2 cache (512KB per core)						siness blad " W X 16.6 Omm W X 2 lb (9.6 k ndle on to shlighted o	optical drive button for					
Memory		2GB, 3GB, or 4GB s UDIMM, PC3-10600 Italics: standard Non-italics: standard * System automatica DDR3 memory contr	1333M d mem d mem lly cloc	IHz DDR3 ory in two ory in one	sockets socket	s; two socke ; three sock	ets avail; cets avail	Bay 6 Bay 6 * bay	<ul> <li>1.5",</li> <li>3.5",</li> <li>only avail</li> <li>half-length</li> </ul>	5", 1.6" high, access, std optical, .35" high, access, opt reader*, .1" high, no access, std disk available on models with media reader installed length, full-height, PCIe 2.0 x16 (60w max) length, full-height, PCIe 2.0 x1			
Graphics		ATI™ Radeon™ 3000 memory (up to 256M one DVI-D connector one DVI-D connector supports dual indepe supports up to 4 mor ATI Radeon discrete	B), on , Direct endent nitors v	e analog \ tX® 10, A display; vith optior	VGA DB TI Avivo nal dual-	-15 connec ™, Surroun				gth, full-height, gth, full-height,  • One lock to entire syster	32-bit PCI Security secure both	2.3 n cover a	nd
SATA disk SATA contro SATA DVD± SATA cables eSATA port Diskette driv Media reade	RW s ⁄e	Serial ATA, SATA 3.0 Super Multi-Burner D	GB, SATA 3.0Gb/s 7200 rpm, vibration dampening mounts ATA 3.0Gb/s, integrated in SB710 arner DL DVD±RW SATA 1.5Gb/s Drive ales (each 1-drop to device), four SATA connectors on planar					Padlock loop (in rear for opt padlock)     Security slot (in rear for optional Kensington® Microsaver® cable)     Power-on password     Administrator password     Hard disk password     Boot sequence control     Boot without keyboard, mouse					
Chipset			Chipset with HyperTransport 3.0 and PCI Express® 2.0 support; th bridge / ITE Tech® IT8720 Super I/O					ort;	Serial port I/O control     USB port disablement				
Front ports Rear ports Rear audio   Internal con Audio Speaker	ports nector	Two USB 2.0, microp Four USB 2.0, serial ethernet (RJ-45), mo Line-in (stereo, 3.5m Two USB 2.0 planar High Definition (HD) One internal speaker	(9-pin) nitor (\ m), line conn ( Audio,	, keyboar VGA DB-1 e-out (ste 1 used; or Realtek®	d (PS/2) 15, DVI-I reo, 3.5r ne open ALC662	), mouse (F D) nm), micro for media r	PS/2), phone (ste	reo, 3.5	mm) SB ports)_	Supports ThinkVantage® technologies			
IEEE 1394 Ethernet Modem Security chi	n	None Gigabit ethernet on p None Winbond® WPCT210						1 2-00	mnliant	GREENGUARD® certified RoHS-compliant			
Keyboard Mouse Power suppl		Preferred Pro USB K Optical Wheel Mouse 280 watts with variab	eyboa e (USB	rd (USB c	onnecto	or), 104-key dpi, black, l	, black, Ler	novo® lo		Li  ⇒ 3-year part ⇒ Internation ⇒ Customer	al Warranty	Service	
- Some: G F - Some: G F Preloaded some listed • Rescue • Passwor • ThinkVal • ThinkVal • Norton™ (30 days • Adobe® • Skype™ • Microsof purchase • Corel® B	Genuin Profess Genuin Profess I applied) and Red Manntage ! Intage ! Intern Gof viru Reade for Wirt Toffice for Wirt Ge prode	ager System Update Power Manager Foolbox et Security 2011 us definitions) r®	hly	2GB PC3- Super Mu DisplayPo NVIDIA® ( NVIDIA G More acce Acc Guide	-10600 I -10600 I Iti-Burne ort™ to S GeForce eForce s essories	DDR3 UDIN DDR3 UDIN er DL DVD± ingle-link D ** 310 512N 310 DMS55 on O-M75I enovo.con s at lenovo	MM PRW SATA OVI-D Cable MB (DP, VG O (2-DVI, 2- E sheet n/accessor	Drive 4 9 4 A) 5 VGA)5	5J7915 7Y4397 7Y4167	parts only for selecte Mon - Fri c next busing Onsite serv (in eligible • 3-year Lt (ThinkPlt • 4-year Lt (Thi	(with limite d parts³, 8 a overage excess day reservice upgrad locations): 00R 9x5, 4 h us part numl 0R 9x5, 4 h us part numl 0R 9x5, 4 h us part numl 0R 24x7, 4 us part numl 0R 9x5, 4 h us part numl or 24x7, 4 us part numl services at n/thinkplus/nty mainter/allable 7 day14 toll-f warranty p	d onsite am - 5 pn cluding I pronse ti le option our resp mber 41C9 kt Busine oer 41C9 our resp oer 41C9 hour resp oer 41C9 warranty nance free supp	service 1, 1, nolidays, me) s onse 99192) ponse 193) ess Day 194) onse 195) ponse 196)

### ThinkCentre® M75e Accessories

### Partial list of accessories supported on ThinkCentre M75e

IV/	ما	m	n	rv
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1GB PC3-10600 DDR3 Low-Halogen UDIMM	57Y4389 ann 01/12/10
1GB PC3-10600 DDR3 L-H UDIMM (25-Pack)	57Y4419 ann 01/12/10
2GB PC3-10600 DDR3 Low-Halogen UDIMM	57Y4390 ann 01/12/10
2GB PC3-10600 DDR3 L-H UDIMM (25-Pack)	57Y4420 ann 01/12/10

More information at

www.lenovo.com/support/desktopmemorycompatibility

#### Ontical

### Storage and removable storage

250GB SATA 3.0Gb/s Disk (7200 rpm) 500GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015 ann 01/24/06 43R1990 ann 11/06/07
USB 2.0 Portable 320GB Hard Disk	45K1689 ann 03/17/09
USB 2.0 Portable 500GB Hard Disk USB 2.0 Portable Secure 160GB Hard Disk	45K1690 ann 05/26/09 43R2018 ann 11/18/08
USB 2.0 Portable Secure 320GB Hard Disk eSATA/USB 2.0 Secure 500GB Hard Drive 53	43R2019 ann 11/18/08 57Y4400 ann 01/07/10
USB 2.0 Portable DVD Burner  53 LISB-only attach	43N3264 ann 01/05/10

#### Graphics

Small 4163/5042/5046/5054/5062/5058/5064 su	pport Low Profile:
DisplayPort™ to Single-link DVI-D Cable <sup>50</sup>	45J7915 <i>ann 08/05/08</i>
DisplayPort to VGA Monitor Cable <sup>50</sup>	57Y4393 ann 08/04/09
NVİDIA® Quadro® 512MB FX 380 LP	
(DP, DVI with a DVI to VGA converter)	57Y4396 ann 02/02/10
NVIDIA GeForce® 310 512MB (DP, VGA)	57Y4397 ann 02/02/10
NVIDIA GeForce 310 512MB DMS59	
(2-DVI or 2-VGA via DMS59 dongles)	57Y4167 ann 03/02/10

Tower 4162/5041/5044/5053/5061/5057/5063 support:

DisplayPort to Single-link DVI-D Cable <sup>50</sup>	45J7915 ann 08/05/08
DisplayPort to VGA Monitor Cable <sup>50</sup>	57Y4393 ann 08/04/09
NVÍDIÁ GeForce 310 512MB (DP, VGA)	57Y4397 ann 02/02/10
NVIDIA GeForce 310 512MB DMS59	57Y4167 ann 03/02/10
50 Attaches to the Think Centre compatible Display	Port graphics card

### More information at www.lenovo.com/support/graphiccards

#### Keyboard

rtcybouru	
Preferred Pro USB Keyboard	73P5220 ann 06/21/05
Preferred Pro Full Size PS/2 Keyboard	31P7415 ann 06/04/02
Enhanced Performance USB Keyboard	73P2620 ann 03/23/04
Ultraslim Wireless Keyboard and Mouse <sup>52</sup>	57Y4700 ann 09/15/09
ThinkPad USB Keyboard with TrackPoint	55Y9003 ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730 ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155 ann 03/24/09
52 Wireless via 2 4GHz technology using a micro	-size USB receiver

### More information at www.lenovo.com/support/keyboards

### Mouse

Lenovo Optical Mouse (USB)	06P4069 ann 05/21/03
ThinkPad® USB Laser Mouse	57Y4635 ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405 ann 08/27/02
Lenovo Laser Mouse (USB)	41U3074 ann 01/23/07
Lenovo Wireless Laser Mouse - Black <sup>52</sup>	45K1696 ann 11/25/08
Lenovo Wireless Laser Mouse - Red/Black <sup>52</sup>	51J0198 ann 11/25/08
Lenovo Mini Optical Mouse - Black	55Y9308 ann 05/19/09
Lenovo Mini Optical Mouse - White	55Y9309 ann 05/19/09

More information at www.lenovo.com/support/mice

#### Multimedia

ThinkPad In-Ear Headphones<sup>60</sup> 57Y4488 *ann 01/07/10*<sup>60</sup> Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.

#### Modem

USB 2.0 Lenovo Modem 43R1814 ann 02/26/08

### Security

Kensington® MicroSaver® Cable Lock56	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock <sup>56</sup>	45K1620	ann 09/30/08
Lenovo Security Cable Lock	57Y4303	ann 08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06
<sup>56</sup> Attaching to any form factor not only sec	ures the TI	ninkCentre to
the work area, but it also prevents users fr	om openin	g the chassis
itself.	•	•

#### **Monitors**

Lenovo D186 Wide 18.5" Monitor	2580AB1 ann 01/12/10
Lenovo L2230x Wide 21.5" Monitor	5453HB1 ann 06/10/10
ThinkVision® L1711p 17" Monitor	5047HB2 ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1 ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6 ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6 ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6 ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6 ann 10/20/09
ThinkVision L2321x Wide 23" Monitor	4014HB6 ann 06/10/10
ThinkVision L2440p Wide 24" Monitor	4420HB2 ann 09/17/08

More information at www.lenovo.com/thinkvision

#### Monitor Accessories<sup>46</sup>

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
ThinkVision USB Soundbar	40Y7616	ann 08/23/05
ThinkVision Soundbar	45K1263	ann 09/16/08
Kensington MicroSaver Cable Lock56	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock56	45K1620	ann 09/30/08
Lenovo Security Cable Lock	57Y4303	ann 08/24/10
ThinkCentre Extend Arm	57Y4352	ann 07/06/10

<sup>46</sup>Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on desktop accessories, please visit: www.lenovo.com/support/accessories www.lenovo.com/support/desktopaccessories www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories







Lenovo ThinkCentre M90/M90p Eco USFF



Lenovo ThinkCentre M90/M90p Eco USFF





Lenovo ThinkCentre M90/M90p SFF



Lenovo ThinkCentre M90/M90p SFF with ThinkVision L2251x (2578-HB6)





Lenovo ThinkCentre M90/M90p Tower

Lenovo ThinkCentre M90/M90p Tower

Ţ	ype-model	Slot x bay	Processor	GHz	Cores	Memory <sup>8</sup>	SATA disk	SATA optical	Integrated graphics	ENERGY STAR 5.0	Intel vPro	Win7 preload	Global Educ	Avail date
	244-A8U 244-B4U		Core i3-530 Core i3-550	2.93 3.20		2GB 2GB	250GB <sup>2</sup> 320GB	DVD±RW DVD±RW	Intel HD Intel HD		None None	Pro 32 Pro 64		Mar 10 Jan 11

- The most powerful, stable, and manageable desktop with next generation Intel platform
- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i3 Processor i3-530 or i3-550 with dual-core, Intel 64, Hyper-Threading Technology, Virtualization Technology, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache Processor in LGA1156 socket	Eco Ultra Sm	optical disk  1.6" high, access, std optical
Memory	2GB std, 8GB max, PC3-10600 1333MHz DDR3, two 204-pin SODIMM sockets (notebook); Non-italics: standard memory in one socket; one socket available	Bay @ 3.5", Slot 1: Low P	1" high, no access, std disk rofile, 32-bit PCI 2.3 ack color; metal case
Graphics  DP dongle	Intel HD Graphics in processor, HDCP, DirectX® 10, uses main memory (up to 765MB), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display None	• 11.0" W X 9 • 279mm W > • 9.2 lb (4.2 k • Hinged tooll • Toolless dis	1.4" D X 3.1" H  ( 238mm D X 79mm H  ig) in maximum configuration less cover for easy serviceability  k and optical drive removal
SATA disk SATA DVD±RW SATA Controller eSATA port	250GB or 320GB, SATA 3.0Gb/s 7200 rpm Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive Serial ATA, SATA 3.0Gb/s, integrated in chipset, RAID 0/1, two SATA connectors for disk and optical None	System floo	Security  Security Security Security chip (see information on left) Security slot (in rear for attachment of
Diskette drive Media reader	None None		optional Kensington® MicroSaver® cable)
Chipset	Intel Q57 Express Chipset, Platform Controller Hub [PCH] (SATA 3.0Gb/s with RAID 0/1 suppor ethernet, and USB), SMSC® SCH5147 Super I/O	t, PCI,	Power-on password     Hard disk password     Boot sequence control     Power-on password
Front ports Rear ports Rear audio ports Audio Speaker Ethernet Intel AMT	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5m Six USB 2.0, ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo High Definition (HD) Audio, Realtek® ALC662 codec Internal speaker for business audio One gigabit ethernet port, Intel 82578DM, Wake on LAN® None		Boot without keyboard and mouse     Individual USB port disablement
Modem Security chip	None STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant		Environmental Features  •EPEAT™ Gold rating •ENERGY STAR® 5.0-compliant
Keyboard Mouse Power supply	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenco Optical Wheel Mouse (USB connector), black, Lenovo logo External AC/DC adapter, 130 watts, autosensing, 87% PSU	ovo® logo	GREENGUARD® certified     RoHS-compliant
Preloaded oper	eting system <sup>20</sup> Accessories		Supports ThinkVantage® technologies

### Preloaded operating system<sup>20</sup>

- Some: Genuine Windows® 7 Professional 32
- Some: Genuine Windows 7 Professional 64

#### Preloaded applications<sup>5</sup> (all OSes; only some listed)

- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update
- ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)

- Adobe® Reader® Adobe Flash® Player Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

### Accessories

500GB SATA 3.0Gb/s Disk(7200 rpm) 43R1990 1TB SATA 3.0Gb/s Disk (7200 rpm) 45J7918 Super Multi-Burner DL DVD±RW SATA Drive 41N5620 DisplayPort to Single-link DVI-D Cable
DisplayPort to VGA Monitor Cable 45J7915 57Y4393 Lenovo Vertical PC and Monitor Stand II 41R4474 ThinkCentre Ultra Small Under Desk Mount 40Y8625 More accessories on O-M90 sheet

Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories

### Limited Warranty<sup>1</sup>

- 3-year parts and labor
- International Warranty Service<sup>9</sup>
  Customer Replaceable Unit (CRU)
- parts only (with limited onsite service for selected parts3, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)
- Onsite service upgrade options (in eligible locations):
  - 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)
  - 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193)
  - 4-year LOR 9x5, Next Business Day (ThinkPlus part number 41C9194) 4-year LOR 9x5, 4 hour response
  - (ThinkPlus part number 41C9195) 4-year LOR 24x7, 4 hour response
- (ThinkPlus part number 41C9196) ThinkPlus services at
- lenovo.com/thinkplus/warranty
- Post warranty maintenance
- services available
- 24 hour x 7 day14 toll-free support during the warranty period<sup>1</sup> via 800-426-7378

Slot x Type-model bay	Processor	GHz Co	res Memory	SATA disk	SATA optical	Graph	Moni ics cor		ENERGY STAR 5.0	Intel vPro	Win7 preload	Global Educ	Ava dat		
3245-A9U 2x3 3245-B3U 2x3 3245-B7U 2x3 3245-B1U 2x3	Core i3-530 Core i3-530 Core i3-550 Core i5-750	2.93 2 2.93 2 3.20 2 2.66 4	2GB 4GB 2GB	250GB <sup>2</sup> 320GB 320GB 500GB	DVD±RW DVD±RW DVD±RW DVD±RW	Intel I Intel I Intel I 310	HD VGA	, DP , DP , DP	ES50 ES50 ES50 ES50	None None None None	Pro 32 Pro 64 Pro 64 Pro 32	None None None	Mar 10 Mar 10 Dec 10 Mar 10		
•	The most power These small and These models of These systems	nd medium have a 3-ye	business (Š ar limited w	TopSeller											
Positioning Processor	Ultimate securi Intel® Core™ i3 Intel 64, Intel H Virtualization To DDR3 memory Intel Core i5 P Intel 64, Virtual (up to 3.20 GH dual-channel D	B Processo lyper-Threa echnology, controller, rocessor i ization Tec z at max tu DR3 mem	or i3-530 or ading Technor integrated 1 and 4MB ca 5-750 with quantities mode), in controlle	<b>i3-550́</b> with blogy, 333MHz che or <b> uad-core</b> bo Boost∃ ntegrated	h dual-core, dual-channel , Technology 1333MHz	se	Bay ② 3.8 Bay ③ 3.8 Slot 1: Lo	5", 1 5", . w Pro	optical disk (in rear)  .6" high, access, std optical high, no access, std disk 5" high, access, open (reader) file, PCI Express 2.0 x16 (75w max)						
Implementation Memory  Graphics	Processor in LO 2GB, 3GB, or 4 PC3-10600 13: Italics: sta Non-italics: sta Some: Intel H	s bla X 14 W X 7.5 k	v Profile, 32-bit PCI 2.3 s black color; metal case X 14.0" D X 3.9" H W X 355mm D X 99mm H 7.5 kg) in maximum configuration cover flips up and tilts backward on rear h												
	uses m 1759M one Dis suppor Some: NVIDIA	adar syst floor	oter reten em board stand for	tion retentio vertical	n orientatio Security		a left\								
DP dongle SATA disk SATA DVD±RW SATA Controller eSATA port Diskette drive	250GB, 320GB, or 500GB, SATA 3.0Gb/s 7200 rpm  D±RW Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive  Serial ATA, SATA 3.0Gb/s, integrated in chipset, RAID 0/1, two SATA connectors for disk and optical  None									Security chip (see information     Security slot (in rear for attachroptional Kensington® MicroSavcable)     Power-on password     Hard disk password     Boot sequence control     Boot without keyboard and moserial port I/O control     Individual USB port disableme					
Media reader Chipset Front ports	Intel Q57 Expr RAID 0/1 support Two USB 2.0, r	ort, PCI, et	hernet, and	USB), SM	SC® SCH514	h	Thairing a port disasionione								
Rear ports Rear audio ports Internal connector Audio Speaker Ethernet Intel AMT	Six USB 2.0, se Line-in (stereo,	erial (9-pin) 3.5mm), li lanar conn (HD) Audio er for busin	, ethernet (F ne-out (stere (1 used; one o, Realtek® A ess audio	RJ-45), mo eo, 3.5mm e open for ALC662 co	onitor (VĜA D ), microphono media reade odec	B-15, [ e-in (ste	DisplayPort ereo, 3.5mi	'n)		™ Gold r Y STAF IGUARE	l® 5.0-com )® certified	npliant	i		
Modem Security chip	None STMicroelectro		NP18 Truste	d Platform	Module (TP	<b>М</b> ),			Supports		intage® te		ies		
Keyboard Mouse Power supply	louse Optical Wheel Mouse (USB connector), black, Lenovo logo 240 watts with 85% efficiency, auto-sensing, active Power Factor Correction  Preloaded operating system <sup>20</sup> Some: Genuine Windows® 7 1GB PC3-10600 DDR3 UDIMM 57Y4 Professional 32 2GB PC3-10600 DDR3 UDIMM 57Y4 Some: Genuine Windows 7 500GB SATA 3.0Gb/s Disk (7200 rpm) 43R1 Professional 64 1TB SATA 3.0Gb/s Disk (7200 rpm) 45J73 Super Multi-Burner DL DV±RW SATA Drive 41N5 Super Multi-Burner DL Dv±RW SATA Drive 41N5 DisplayPort to Single-link DVLD Cable 45 I7									r parts a national omer Re only (wi	and labor Warranty placeable ith limited	Service <sup>9</sup> Unit (CF onsite s	RU) service		
- Some: Genuin Profess - Some: Genuin Profess - Some: Genuin Profess - Some: Genuin Profess - Sene: Genuin Profess - Sene: Genuin Profess - Rescue and Rescue and Rescue and Rescue and Rescue and Rescue and Rescue Antipological Profess - ThinkVantage T										Fri covousinesse e service gible loo ear LOR inkPlus pear	ay <sup>14</sup> toll-front erranty pe	luding hoonse tine options ur response 4109 our responser 41091 ur responser 41091 our	olidays ne) 5 nnse 9192) oonse 93) ss Day 94) onse 95) oonse		

Slot x				SATA	2nd Disk	SATA		Monito	ENERGY	Intel	Win7	Global	Avail				
Type-model bay			Memory	disk	Bay	optical	Graphics	conn	STAR 5.0	vPro	preload	Educ	date				
•	Core i5-750 2 Core i3-530 2	medium b ave a 3-yea	usiness (S r limited v	MB) mod varranty	None None None esktop wi dels are p	art of the U	310 Intel HD Intel HD eration In	VGA, D VGA, D VGA, D Itel platfo	P ES50 P ES50 P ES50 orm	None None None	Pro 32 Pro 32 Pro 64 Pro 64	None None	Mar 10 Mar 10 Mar 10 Dec 10				
Positioning	Ultimate security,						Tower										
Processor Implementation	Intel® Core™ i3 Processor i3-530 or i3-550 with dual-core, Intel 64, Intel Hyper-Threading Technology, Virtualization Technology, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache or Intel 64, Virtualization Technology, Turbo Boost Technology (up to 3.20 GHz at max turbo mode), integrated 1333MHz dual-channel DDR3 memory controller, and 8MB cache Processor in LGA1156 socket  2GB, 3GB, or 4GB std, 16GB max, UDIMM,  ■ Business black color; metal case 6.9" W X 17.4" D X 16.3" H  24.2 lb (11.0 kg) in max configuration Handle on top front Power button on top handle Toolless cover removal Tilted front I/O for easy access Toolless disk, optical drive removal Toolless adapter retention																
Memory				, rai													
	PC3-10600 1333MHz DDR3, four 240-pin DIMM sockets;  **Italics:** standard memory in two sockets; two sockets available;  **Non-italics:** standard memory in one socket; three sockets available  Bay ① 5.25", 1.6" high, access, open  standard memory in one socket; three sockets available  Bay ② 5.25", 1.6" high, access, open																
Graphics	Some: Intel HD Graphics in processor, HDCP, DirectX® 10, uses main memory (up to 765MB [2GB models]) or 1759MB [4GB models]), one analog VGA DB-15 connector, one DisplayPort™ conn, supports dual independent display Some: NVIDIA® GeForce® 310, PCI Express® 2.0 x16 adapter, 512MB, one analog VGA DB-15 connector, one DisplayPort connector, HDCP, DirectX 10,																
NVIDIA PureVideo®, NVIDIA CUDA™, 30 watts  DP dongle None Security																	
SATA DVD±RW SATA Controller	250GB, 320GB, 6 Super Multi-Burn Serial ATA, SATA three SATA conne None		Security chip (see information on left)     One lock to secure both cover and entire system to fixed object:     Padlock loop (in rear for opt padlock)     Security slot (in rear for optional Kensington® MicroSaver® cable)														
Diskette drive	None								Kensin Power-oi			r® cable	·)				
Chipset	None Intel Q57 Expres Platform Controlle ethernet, and US	er Hub [PC	H] (SATA			0 0/1/10 su	oport, PC	l,	Hard disk password     Boot sequence control     Boot without keyboard and mouse     Serial port I/O control     Individual USB port disablement								
Rear audio ports Internal connector Audio Speaker Ethernet	Two USB 2.0 plar High Definition (H Internal speaker One gigabit ether	al (9-pin), c .5mm), line nar conn (1 ID) Audio, for busines	ethernet (I e-out (stere used; on Realtek® / s audio	RJ-45), meo, 3.5mre open fo ALC662 o	nonitor (V n), microp or media r codec	ĜA DB-15, phone-in (s eader or 2	DisplayPotereo, 3.5	ort) mm) ports)		nvironn Gold rat STAR®	nental Fe ing 5.0-com	atures					
Intel AMT Modem	None None							(	Supports T	hinkVan	tage® ted	hnolog	ies				
Security chip	STMicroelectronic TCG 1.2-complia		P18 Truste	d Platforr	m Module	(TPM),				Limite	d Warra	nty¹					
Mouse	Preferred Pro US Optical Wheel Mc 280 watts with va	B Keyboar	connecto	r), black,	Lenovo lo	go	ovo® logo	' I	<ul><li>⇒ 3-year p</li><li>⇒ Internat</li><li>⇒ Custom</li></ul>	tional W ner Repl	arranty S aceable l	Jnit (CF	RU)				
Preloaded opera - Some: Genuine Professi - Some: Genuine Professi Preloaded applic some listed) • Rescue and Re • Password Mana • ThinkVantage F • ThinkVantage F • Norton™ Interne (30 days of viru • Adobe Flash® F • Skype™ for Win • Microsoft Office purchase produ	//MM //MM 200 rpm) 0 rpm) FRW SATA I-D Cable Cable (DP, VGA) sheet n/accessor .com/acce	57Y 43R 45J Drive 41N 45J 57Y 57Y	7918 15620 7915 4393 4397	for sele Mon - F next bu Onsite : (in eligi • 3-yea (Thinl • 4-yea	cted pari cover siness of service ble loca ir LOR 9 kPlus™ ; ir LOR 9 kPlus™ par LOR 9 kPlus par LOR 9 kPlus par LOR 9 kPlus par LOR 9 kPlus par lor LOR 9 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par ir LOR 2 kPlus par	tions):7 x5, 4 hou art number 4x7, 4 ho rt number x5, Next rt number rt number 4x7, 4 ho rt number ices at nkplus/wa maintena ble	a - 5 pm, uding ho ponse tim options ir respo er 41C919 Busines 41C919 ir respo er 41C919 er 41C919 rranty nce	olidays, ne) onse 1192) oonse 93) ss Day 94) nse 95) oonse									

	Type-model	Slot x bay		Base GHz	Max Turbo GHz		Memory <sup>8</sup>	SATA disk	SATA optical	Integrated graphics	Monitor conn	ENERGY STAR 5.0	Intel vPro		Global Educ	Avail date
	3257-A5U	1x2	Core i5-650	3.20	3.46	2	3GB	500GB <sup>2</sup>	DVD±RW	Intel HD	VGA, DP	ES50	vPro	Pro 32	None	Mar 10
ß	3257-A9U	1x2	Core i5-650	3.20	3.46	2	3GB	500GB	DVD±RW	Intel HD	VGA, DP	ES50	vPro	Pro 64	None	Dec 10

- Next generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Most manageable ThinkCentre ever: supports Lenovo Secure Managed Client version 2.0 These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)
- \* For more information on Lenovo Secure Managed Client, see lenovo.com/acc

Positioning Processor	Ultimate security, stability, and manageability for the enterprise Intel® Core™ i5 Processor i5-650 with dual-core, Intel 64, Hyper-Threading Technology, Turbo Boost Technology, Virtualization Technology, TXT, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache Processor in LGA1156 socket	Eco Ultra Sm	optical disk  optical disk  1.6" high, access, std optical
Memory	<b>3GB std</b> , 8GB max, <b>PC3-10600 1333MHz DDR3</b> , two 204-pin SODIMM sockets (notebook); <i>Italics:</i> standard memory in both sockets; no sockets available	Bay ② 3.5", Slot 1: Low P	1" high, no access, std disk rofile, 32-bit PCI 2.3 ack color; metal case
Graphics  DP dongle	Intel HD Graphics in processor, HDCP, DirectX® 10, uses main memory (up to 1277MB), one analog VGA DB-15 connector, one DisplayPort™ connector, supports dual independent display None	• 11.0" W X 9 • 279mm W X • 9.2 lb (4.2 k • Hinged tooll • Toolless dis	.4" D X 3.1" H ( 238mm D X 79mm H g) in maximum configuration less cover for easy serviceability k and optical drive removal
SATA disk SATA DVD±RW SATA Controller	<b>500GB</b> , SATA 3.0Gb/s 7200 rpm Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive Serial ATA, SATA 3.0Gb/s, integrated in chipset, RAID 0/1, two SATA connectors for disk and optical	• System 1100	r stand for vertical orientation  Security  • Security chip (see information on left)
eSATA port Diskette drive Media reader	None None None		Securitý slot (în rear for attachment of optional Kensington® MicroSaver® cable)
Chipset	Intel Q57 Express Chipset, Platform Controller Hub [PCH] (SATA 3.0Gb/s with RAID 0/1 suppore ethernet, and USB), SMSC® SCH5147 Super I/O	t, PCI,	Power-on password     Hard disk password     Boot sequence control     Boot without keyboard and mouse
Front ports Rear ports Rear audio ports Audio Speaker Ethernet	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5ix USB 2.0, ethernet (RJ-45), monitor (VGA DB-15, DisplayPort) Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stellar) Definition (HD) Audio, Realtek® ALC662 codec Internal speaker for business audio One gigabit ethernet port, Intel 82578DM, Wake on LAN®	,	Individual USB port disablement
Intel AMT Modem Security chip	Intel Active Management Technology 6.0 (Intel AMT 6.0) None STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant		Environmental Features  • EPEAT™ Gold rating • ENERGY STAR® 5.0-compliant • GREENGUARD® certified
Keyboard Mouse Power supply	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenco Optical Wheel Mouse (USB connector), black, Lenovo logo External AC/DC adapter, 130 watts, autosensing, 87% PSU	ovo® logo	RoHS-compliant  Supports ThinkVantage® technologies

### Preloaded operating system<sup>20</sup>

- Some: Genuine Windows® 7
  - Professional 32
- Some: Genuine Windows 7 Professional 64

#### Preloaded applications<sup>5</sup> (all OSes; only some listed)

- Rescue and Recovery™
- Password Manager
- ThinkVantage System Update ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions) Adobe® Reader®
- Adobe Flash® Player
- Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

### Accessories

500GB SATA 3.0Gb/s Disk (7200 rpm) 43R1990 1TB SATA 3.0Gb/s Disk (7200 rpm) 45J7918 Super Multi-Burner DL DVD±RW SATA Drive 41N5620 DisplayPort to Single-link DVI-D Cable DisplayPort to VGA Monitor Cable Lenovo Vertical PC and Monitor Stand II 45J7915 57Y4393 41R4474 ThinkCentre Ultra Small Under Desk Mount 40Y8625 More accessories on O-M90 sheet

Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories

### Limited Warranty<sup>1</sup>

- 3-year parts and labor
- International Warranty Service<sup>9</sup>
  Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts3, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)
- Onsite service upgrade options (in eligible locations):7
  - 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192)
  - 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193) 4-year LOR 9x5, Next Business Day
  - (ThinkPlus part number 41C9194) 4-year LOR 9x5, 4 hour response
  - (ThinkPlus part number 41C9195) 4-year LOR 24x7, 4 hour response
- (ThinkPlus part number 41C9196) ThinkPlus services at
- lenovo.com/thinkplus/warranty
- Post warranty maintenance services available
- 24 hour x 7 day14 toll-free support during the warranty period<sup>1</sup> via 800-426-7378

Slot x Type-model bay	Processor	Base I	Max Turbo GHz	Cores	Memory <sup>8</sup>	SATA disk	SATA optical	Gra	aphics				/ Intel	Win7 preload	Globa	Avail date
3269-A6U 2x3 3269-B5U 2x3 3269-A8U 2x3	Core i5-650 Core i5-650 Core i5-650 Core i7-870	3.20 3.20 3.20	3.46 3.46 3.46 3.60	2 2 2 2 4	3GB 3GB 4GB 4GB	500GB <sup>2</sup> 500GB 320GB 500GB	•	In In	tel HD tel HD tel HD	VGA, I VGA, I VGA, I VGA, I	OP OP OP	ES50 ES50 ES50	vPro vPro vPro vPro	Pro 32 Pro 64 Pro 64 Pro 64	None None None	Mar 10 Dec 10 Mar 10 Oct 10
* For more informa	<ul> <li>Next Gen</li> <li>Most mai</li> <li>These sn</li> <li>These sy</li> <li>These sy</li> <li>ation on Lend</li> </ul>	nageabl nall and odels ha stems a	le ThinkCe   medium   ave a 3-ye are Micros	entre e busine ar lim soft® C	ever: supp ess (SMB) ited warra Office 201	oorts Len ) models anty¹ 0 Produc	ovo Secure are part of t Key Ready	Mai the	naged C US TopS	Client ve	ersio	n 2.0*	nent Tec	hnology		
Positioning Processor	Ultimate see Intel® Core® Intel 64, Hyy Virtualizatio DDR3 mem Intel 64, Hyy Virtualizatio DDR3 mem Processor in	curity, some is property of the contract of th	tability, and cessor is eading Tender, and troller, and essor i7-8 eading Tender, and troller,	d mar 5-650 chnolo T, inte d 4ME 70 wit chnolo T, inte d 8ME	nageabilit with dual ogy, Turbo grated 13 cache of th quad- ogy, Turbo grated 13	y for the of I-core, of Boost Tests 333MHz of the core, of Boost Tests 335 Boost Tests 355 Boo	enterprise echnology, dual-channe echnology,		Bay ③ Slot 1:	3.5", 3.5", Low Pr	1" hi .5" h ofile,	gh, n igh, a PCI E	o acces ccess,	std opt s, std disl open (i 2.0 x16 (7	k reader)	·)
Memory	3GB or 4GE four 240-pin	3 std, 1	6GB max		/IM, PC3-	10600 13	33MHz DD	R3,	• 12.5"	W X 14	4.0"	D X 3.9				
Graphics	[4GI Disp Some: NVII	HD Gr n memo B mode blayPort DIA® Ge	raphics in ory (up to ls]), one a ™ connec	proce 1277M Inalog Itor, su	essor, HD IB <i>[3GB n</i> VGA DB- pports du CI Expres	CP, Direct conodels] of 15 connectal al indepense 2.0 x1	etX® 10, use r 1759MB ector, one endent displ		<ul> <li>16.5 I</li> <li>Toolle</li> <li>Toolle</li> <li>Toolle</li> </ul>	lb (7.5 less covess diskess ada	kg) ir er fli k, op ipter tem	n maxi ps up a tical dr retent board	and tilts rive remo ion retentior	nfiguratior backward oval	on rear	hinges
DP dongle			Port conn DA™, 30 \		HDCP, D	irectX 10	, NVIDIA Pi	ure√	/ideo®,					Security ee inform	ation or	
SATA disk 320GB or 500GB, SATA Super Multi-Burner DL [				/D±RW SATA 1.5Gb/s Drive integrated in chipset, RAID 0/1,							Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)     Power-on password     Hard disk password     Boot sequence control     Boot without keyboard and mouse     Serial port I/O control					
Chipset	Intel Q57 E									with	• 11	ndividu	ıal USB	port disab	lement	
Front ports Rear ports Rear audio ports Internal connector Audio Speaker Ethernet	Two USB 2. Six USB 2.0 Line-in (ster Two USB 2. High Definit Internal spe One gigabit	), serial eo, 3.5r 0 plana ion (HD aker for	(9-pin), e mm), line- r conn (1 ) Audio, F business	therne out (st used; lealtel audic	et (RJ-45) tereo, 3.5 one open (® ALC66)	, monitor mm), mic I for medi 2 codec	(VGA DB-1 crophone-in a reader or	5, D (ste	DisplayPereo, 3.5	imm)	• El	PEAT <sup>®</sup> NERG REEN	<sup>™</sup> Gold ra Y STAR	5.0-com certified	pliant	
Intel AMT Modem	Intel Active										Sup	ports -	ThinkVa	ntage® ted	chnologi	es
Security chip	STMicroelec TCG 1.2-co			18 Tru	sted Platf	orm Mod	ule (TPM),				<i>=</i>	3-year		ed Warra nd labor	nty¹	
Keyboard Mouse Power supply	Preferred Properties of Preferred Properties of Preferred Preferre	el Mous	se (USB d	connec	ctor), blac	k, Lenov	o logo				=	Internation Custo parts	ational V mer Rep only (wit	Varranty S laceable l th limited arts <sup>3</sup> , 8 am	Unit (CF onsite s	RU) service
- Some: Genuin	e Windows® ional 32 e Windows 7 ional 64 cations⁵ (all covery™ ager System Upda Power Managoolobox et Security 2 e 2010 preloa ict key to act	10 20 50 17 Sinly Di Di N' N' M	GB PC DOGB TB SA uper M isplayl isplayl VIDIA VIDIA ore ac cc Gui	23-10600 23-10600 SATA 3.0Gb Multi-Burn Port to Sin Port to VC GeForci Quadro® ccessories de in pdf	DDR3 U Gb/s Disk /s Disk (7 er DL DV ngle-link A Monite e® 512MB F s on O-M	DIMM x (7200 rpm) r200 rpm) rD±RW SAT. DVI-D Cable or Cable 3 310 (DP, V	A Die GA OP, I	57Y 43F 45J rive 41N 45J 57Y ) 57Y DVI) 57Y	7915 ′4393 ′4397	4 4	next b Onsite (in elig 3-ye (Thi 3-ye (Thi 4-ye (Thi 4-ye (Thi Henova Post w servic 24 hou	estiness estate	inkplus/wa <b>maintena</b>	onse tin options ur respo oer 41C9 our resp r 41C91 Busine r 41C91 our resp r 41C91 our resp r 41C91 our resp r 41C91	onse 93) ss Day 94) onse 95) onse 95) onse	

Slot x Type-model bay	Processor GHz GHz	Cores Memory <sup>8</sup> disk			Integrated graphics				Win7 preload	Global Educ	Avai date
3282-B6U 4x4 3282-B1U 4x4	Core i5-650 3.20 3.46 Core i5-650 3.20 3.46 Core i5-650 3.20 3.46 Core i7-870 2.93 3.60	2 3GB 500G 2 3GB 500G 2 4GB 320G 4 4GB 500G	B None DVE B None DVE B None DVE	D±RW D±RW D±RW	Intel HD Intel HD 310	VGA, DP VGA, DP VGA, DP	ES50 ES50 ES50	vPro vPro vPro		None None	Mar 10 Dec 10 Mar 10 Oct 10
* For more informa	Next Generation Intel       Most manageable Thir     These small and medi     These models have a s     These systems are Miation on Lenovo Secure M	kCentre ever: suppor um business (SMB) m B-year limited warrant crosoft <sup>®</sup> Office 2010 P	ts Lenovo Secu odels are part o v¹ roduct Key Rea	re Mar of the l	naged Cliei US TopSell	nt versio	n 2.0*	nt Tech	inology		
Positioning Processor	Ultimate security, stability Intel® Core™ i5 Process Intel 64, Hyper-Threading Virtualization Technology, DDR3 memory controller, Intel Core i7 Processor Intel 64, Hyper-Threading Virtualization Technology, DDR3 memory controller, Processor in LGA1156 sc	and manageability for i5-650 with dual-ci. Technology, Turbo Bo TXT, integrated 1333 and 4MB cache or i7-870 with quad-con. Technology, Turbo Bo TXT, integrated 1333 and 8MB cache	or the enterprise ore, post Technology MHz dual-chan e, post Technology	/, nel	Tower  Business  6.9" W X  175mm  24.2 lb ( Handle c  Power b  Toolless  Tilted fro	( 17.4" D W X 442 11.0 kg) on top fro utton on cover re	X 16.3" I mm D X in max co ont top hand moval	H 414mn onfigur Ie	n H	optica ② ③ disk	
Implementation  Memory  Graphics	3GB or 4GB std, 16GB ri four 240-pin DIMM socke <i>Italics:</i> standard memory <i>Some:</i> Intel HD Graphic	nax, UDIMM, PC3-100 ts; in two sockets; two so s in processor, HDCF	ockets available DirectX® 10, u	ises	<ul><li>Toolless</li><li>Toolless</li><li>Bay ① 5.2</li><li>Bay ② 5.2</li><li>Bay ③ 3.5</li></ul>	adapter 25", 1.6" 25", 1.6" 5", 1" hi	retention high, acc high, acc gh, acc	ess, ess,	std opti open open (r	eader/c	liskette
	[4GB models]), or DisplayPort™ con Some: NVIDIA® GeForce 512MB, one analo	to 1277MB[3GB moc ne analog VGA DB-15 nector, supports dual s 310, PCI Express og VGA DB-15 connec onnector, HDCP, Dire	connector, one independent dis 2.0 x16 adapter stor,	splay	Bay ④ 3.5 Slot 1: hal Slot 2: hal Slot 3: hal Slot 4: hal	f-length, f-length, f-length,	full-heigh full-heigh full-heigh	t, PCle t, PCle t, 32-b	e 2.0 x1 oit PCI 2.3	(75w m 3	ıax)
DP dongle		o®, NVIDIA CUDA™, 3						Se	curity		
SATA disk	320GB or 500GB, SATA Super Multi-Burner DL D	D±RW SATA 1.5Gb/s Drive integrated in chipset, RAID 0/1/10, disk and optical  et, Platform Controller Hub [PCH] (SATA 3.0Gb/s with ethernet, and USB), SMSC* SCH5147 Super I/O					Security chip (see information on left)     One lock to secure both cover and entire system to fixed object:     Padlock loop (in rear for opt padlock)     Security slot (in rear for optional Kensington® MicroSaver® cable)     Power-on password     Hard disk password     Boot sequence control     Boot without keyboard and mouse				
Chipset	Intel Q57 Express Chips										е
	Two USB 2.0, microphon. Six USB 2.0, serial (9-pin Line-in (stereo, 3.5mm), I Two USB 2.0 planar conr High Definition (HD) Audi Internal speaker for busin One gigabit ethernet port Intel Active Management None STMicroelectronics ST19	), ethernet (RJ-45), m ne-out (stereo, 3.5mn (1 used; one open fo o, Realtek® ALC662 c ess audio , Intel 82578DM, Wak Technology 6.0 (Intel	onitor (VGA DB n), microphone- r media reader o odec e on LAN® AMT 6.0)	3-15, D -in (ste or 2 re	isplayPort) reo, 3.5mn	• Ir n) rts) • EF • EI • GI • Ro					
Security Crip	TCG 1.2-compliant	NF 16 Trusted Flation	i Module (Trivi	),		Sup	<u> </u>		tage® tec		es
Keyboard Mouse Power supply	Preferred Pro USB Keybo Optical Wheel Mouse (US 280 watts with variable sp	SB connector), black, í	_enovo logo	, Lenov	vo® logo	=	3-year pa Internatio	rts an	d Warrar d labor arranty S aceable l	ervice <sup>9</sup>	lU)
- Some: Genuing Profess  Preloaded applic some listed)  • Rescue and Re • Password Mana • ThinkVantage F • ThinkVantage T • Norton™ Intern • Adobe® Readel • Adobe Flash® F • Skype™ for Wir • Microsoft Office purchase produ • Corel® Burn.No	e Windows® 7 ional 32 e Windows 7 ional 64 cations⁵ (all OSes; only ecovery™ ager System Update Power Manager Toolbox et Security 2011 (30-day) © Player Idows e 2010 preloaded; out key to activate	Accessories  1GB PC3-10600 DE  2GB PC3-10600 DE  500GB SATA 3.0Gb  1TB SATA 3.0Gb/s I  Super Multi-Burner  DisplayPort to Singl  DisplayPort to VGA  NVIDIA® GeForce®  More accessories o  Acc Guide in pdf ler  Other accessories a	PR3 UDIMM 's Disk (7200 rp Disk (7200 rpm) DISK (7200 rpm) DL DVD±RW S/ B-link DVI-D Ca Monitor Cable D12MB 310 (DF D10-M90 sheet D10-M90 sheet D10-M90-Com/acce	) ATA Dr ble P, VGA) ssories	45J79 <sup>-</sup> 57Y43 <sup>-</sup> 57Y43 <sup>-</sup> sguide	889 900 990 18 18 15 15 993 997	ior selection se	ced pai cover, ness of rivice le loca LOR 9 Plus™ p LOR 2 Plus pa LOR 9 Plus pa LOR 2 Plus pa service service of day e warr	x5, 4 hou bart numb 4x7, 4 ho rt number x5, Next I rt number x5, 4 hou rt number 4x7, 4 ho rt number ices at ikplus/wai t toll-free anty peri	- 5 pm, uding house timoptions or responder 41C9 ur responder 41C918 Busines 41C919 or 41C919 ur responder 41C919 rranty e supponder supponder	nse 1192) onse 93) 94) nse 95) onse 96)

## ThinkCentre® M90, M90p Accessories

## Partial list of accessories supported on ThinkCentre M90 and

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Memory	
Eco Ultra Small 3244/3692/3257/3853/5296 use noteb	ook memory:
1GB PC3-10600 DDR3 L-H SODIMM 55Y370	9 ann 03/02/10
1GB PC3-10600 DDR3 L-H SODIMM (25Pack) 57Y441	5 ann 03/02/10
2GB PC3-10600 DDR3 L-H SODIMM \ 55Y371	0 ann 03/02/10
2GB PC3-10600 DDR3 L-H SODIMM (25Pack) 57Y441	6 ann 03/02/10
4GB PC3-10600 DDR3 L-H SODIMM 555Y371	1 ann 03/02/10

Small 3245/5485/3269/5536/5864, and

Tower 3246/5474/3282/5498/5852 use desktop memory: 1GB PC3-10600 DDR3 Low-Halogen UDIMM 57Y4389 ann 01/12/10 1GB PC3-10600 DDR3 L-H UDIMM (25-Pack) 57Y4419 ann 01/12/10 2GB PC3-10600 DDR3 Low-Halogen UDIMM 57Y4390 ann 01/12/10 2GB PC3-10600 DDR3 L-H UDIMM (25-Pack) 57Y4420 ann 01/12/10

More information at

www.lenovo.com/support/desktopmemorycompatibility

#### Optical

DVD-ROM DL SATA 1.5Gb/s 16X-48X Max4	41N5618	ann 09/26/06
Super Multi-Burner DL DVD±RW SATA Drive	41N5620	ann 09/26/06
Blu-ray™ Burner SATA 1.5Gb/s Drive	45K1675	ann 03/31/09

Storage and removable storage

Storage and removable storage	
250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015 ann 01/24/06
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990 ann 11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918 ann 08/19/08
USB 2.0 Portable 320GB Hard Disk USB 2.0 Portable 500GB Hard Disk USB 2.0 Portable Secure 160GB Hard Disk USB 2.0 Portable Secure 320GB Hard Disk eSATA/USB 2.0 Secure 500GB Hard Drive <sup>53</sup> USB 2.0 Portable DVD Burner	45K1689 ann 03/17/09 45K1690 ann 05/26/09 43R2018 ann 11/18/08 43R2019 ann 11/18/08 57Y4400 ann 01/07/10 43N3264 ann 01/05/10
53 USB-only attach.	431\\\3204\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
OOD-Only attach.	

Graphics

Small 3245/5485/3269/5536/5864 support Low Profile:

INVIDIA® Quadro® 256MB INVS 290	
(2-DVI or 2-VGA via DMS59 dongles)	43R1765 ann 12/18/07
NVIDIA Quadro 256MB NVS 295 (2-DP)	45K1669 ann 04/21/09
NVIDIA Quadro 512MB FX 380 LP	
(DP, DVI with a DVI to VGA converter)	57Y4396 ann 02/02/10
NVIDIA GeForce® 310 512MB (DP, VGA)	57Y4397 ann 02/02/10
NVIDIA GeForce 310 512MB DMS59	
(2-DVI or 2-VGA via DMS59 dongles)	57Y4167 ann 03/02/10

Tower 3246/5474/3282/5498/5852 support 75 watts max:

NVIDIA Quadro 256MB NVS 290	43R1765 ann 12/18/	07
NVIDIA Quadro 256MB NVS 295 (2-DP)	45K1669 ann 04/21/	09
NVIDIA Quadro 512MB NVS450 (4-DP/4-DVI)	57Y4398 ann 01/19/	10
NVIDIA GeForce 310 512MB (DP, VGA)	57Y4397 ann 02/02/	10
NVIDIA GeForce 310 512MB DMS59	57Y4167 ann 03/02/	10

More information at www.lenovo.com/support/graphiccards

### Keyboard

Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultraslim Wireless Keyboard and Mouse <sup>52</sup>	57Y4700	ann 09/15/09
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09
52 Wireless via 2.4GHz technology using a m	nicro-size U	SB receiver.

More information at www.lenovo.com/support/keyboards

#### Mouse

Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo ScrollPoint® Mouse(USB, Optical)	31P7405	ann 08/27/02
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
Lenovo Wireless Laser Mouse - Black <sup>52</sup>	45K1696	ann 11/25/08
Lenovo Wireless Laser Mouse - Red/Black <sup>52</sup>	51J0198	ann 11/25/08

More information at www.lenovo.com/support/mice

#### Multimedia

ThinkPad In-Ear Headphones<sup>60</sup> 57Y4488 ann 01/07/10 60 Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.

#### Security

Kensington® MicroSaver® Cable Lock56	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock <sup>56</sup>	45K1620	ann 09/30/08
Lenovo Security Cable Lock	57Y4303	ann 08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06
56 Attaching to any form factor not only seco	ures the Th	ninkCentre to
the work area, but it also prevents users fr	om openin	g the chassis
itself		•

### **Mounting Device**

Eco Ultra Small 3244/3692/3257/3853/5296 support under desk mounting device:

ThinkCentre Ultra Small Under Desk Mount 40Y8625 ann 09/06/05

#### Monitors

Lenovo D186 Wide 18.5" Monitor	2580AB1 ann 01/12/10
Lenovo L2230x Wide 21.5" Monitor	5453HB1 ann 06/10/10
ThinkVision® L1711p 17" Monitor	5047HB2 ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1 ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6 ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6 ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6 ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6 ann 10/20/09
ThinkVision L2321x Wide 23" Monitor	4014HB6 ann 06/10/10
ThinkVision L2440p Wide 24" Monitor	4420HB2 ann 09/17/08

More information at www.lenovo.com/thinkvision

### Monitor Accessories<sup>46</sup>

Eco Ultra Small 3244/3692/3257/3853/5296 support:

Lenovo Vertical PC and Monitor Stand II 41R4474 ann 01/27/09

Lenovo USB-to-DVI Monitor Adapter 45K5296 ann 05/12/09 DisplayPort™ to Single-link DVI-D Cable DisplayPort to VGA Monitor Cable ThinkVision USB Soundbar ThinkVision Soundbar 45J7915 ann 08/05/08 57Y4393 ann 08/04/09 40Y7616 ann 08/23/05 45K1263 ann 09/16/08 Kensington MicroSaver Cable Lock56 73P2582 ann 12/29/03 Kensington Twin Head Cable Lock<sup>56</sup> Lenovo Security Cable Lock 45K1620 ann 09/30/08 57Y4303 ann 08/24/10 ThinkCentre Extend Arm 57Y4352 ann 0 46 Compatible on selected Lenovo and ThinkVision monitors. 57Y4352 ann 07/06/10

More information at www.lenovo.com/support/monitoraccessories

For more information on desktop accessories, please visit: www.lenovo.com/support/accessories www.lenovo.com/support/desktopaccessories www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories







Lenovo ThinkCentre M90z with Frame Stand

Lenovo ThinkCentre M90z with Height Adjustable Stand Option 57Y4351 (57Y4351 is not compatible to Multi-touch models)





Tool-Less Back Cover Removal

Handle



Dual Independent Display with Optional Lenovo ThinkVision Monitor and Lenovo Ultraslim Wireless Keyboard/Mouse Kit (57Y4700)

	Type-model	Proc- essor	GHz	Memory	Widescreen display	Camera (mega- pixel)	Integrated graphics	SATA disk	SA <sup>-</sup> opti		PCIe Mini Card 802.11	Stand type	Intel vPro	Win7 preload	Global Educ	Avail date
IIS€	3429-A1U 3429-A2U 3429-D6U 3429-D3U 3429-A3U	i3-530 G6960 i3-550	2.93 2.93 3.20 3.20 • Be • The	ese small a ese model	23.0" Full HD 23.0" Full HD 23.0" Full HD 23.0" Full HD 23.0" Full HD 23.0" Full HD saving solution and medium bus is have a 3-yea	2.0M 2.0M 2.0M & exce siness (S	SMB) mode d warranty	500GB 320GB 320GB 500GB manager Is are part	DVD: DVD: DVD: DVD: ment of the	±RW ±RW ±RW ±RW		Frame Frame Frame	vPro	Pro 32 Pro 32 Pro 64 Pro 64 Pro 64	None None None	Jun 10 Jun 10 Jan 11 Dec 10 Jun 10
	Positioning				ns are Microso the enterprise	т Оп	ce 2010 Pr	oauct Key	Reac	<u> </u>	In-One					
Intel® Pentium® Processor G6950 or G6960 with dual-core, Intel 64, Virtualization Technology, integrated 1066MHz dual-channel DDR3 memory controller, and 3MB cache or Intel Core™ i3 Processor i3-530 or i3-550 with dual-core, Intel 64, Hyper-Threading Technology, Virtualization Technology, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache or Intel Core i5 Processor i5-650 with dual-core, Intel 64, Hyper-Threading Technology, Turbo Boost Technology, Virtualization Technology, TXT, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache																
	Implementa Memory	tion			A1156 socket AB std, 8GB ma	x8. PC3-	-10600 133	3MHz DDI	33*.		① 3.5", 1 ② slim, .5				tical (not	
	Graphics		dual-cl * Syste DDR3	hannel cap em automa memory c	able, two 204-p tically clocks do	in SODI wn for p	IMM socket processors	s (noteboo with 1066	k) ИНz			Securit     Securit	ty chip ( ty slot (i	Security see inform n rear for ngton® Mi	attachm	ent of
	DP dongle Widescreen	l	(up to one Di None <b>23.0</b> " ( anti-gla	765MB <i>[20</i> splayPort <sup>Ti</sup> (584.2mm) are, CCFL	GB models], 127 connector, su Full HD 1080p backlight, 250 r contrast ratio, w	77MB <i>[3</i> oports d ( <b>1920x</b> iits, 16:9	GB models dual indeper (1080) TFT ( aspect rat	j, or 1759N ndent disp <b>color</b> , io,	/IB <i>[40</i> ау	ЭВ m		optional Kensington® MicroSaver® cat Kensington lock also locks chassis)  Boot sequence control  Boot without keyboard, mouse  Individual USB port disablement				
	Multi-touch Camera		None	Camera	on top of screer n stereo, LED ir	n, 2.0-m	egapixel, fix	ed focus,	integra							
	SATA disk SATA DVD± eSATA port Diskette driv Media reade	ve			3, SATA 3.0Gb/s A 1.5Gb/s, 12.7			om								
	Chipset		Intel C	257 Expres	ss Chipset er Hub (PCH) fo	or SATA	ethernet a	and LISB								
	Ports		Rear:	four USB 2	2.0, ethernet (R	J-45), D	isplayPort, \	VGA-in co				Supports ThinkVantage® technologies				
	PCIe Mini C Intel 1000 Bluetooth™ Ethernet Audio	0	One P 11b/g/ None One gi	CI Express n wireless <sup>1</sup> igabit ether	.0, microphone Mini Card slot , PCIe Half Mir rnet port, Intel 8 ID) Audio, Real	i Card, 2578DN	Intel Centri	no® Wirele	•		· /	EPEAT™ Gold rating     ENERGY STAR® 5.0-compliant     TCO Certified Edge     GREENGUARD® certified     RoHS-compliant				
	Speaker IEEE 1394 Intel AMT Modem Security chi		Two in None <i>vPro n</i> None	ternal spèa nodel(s):	akérs (2wátt x 2	Manag	ement Tech	nology 6.0	`		<i>′</i>	□ Intern     □ Custo	r parts a national omer Re	ited Warra and labor Warranty placeable	Service <sup>9</sup> Unit (Cl	RU)
	Keyboard Mouse Power supp		Preferi Optica	red Pro US I Wheel Mo	B Keyboard (USB conrensing, 85% PS	SB connector),	nector), 104 400 dpi, bla	-key, black .ck, Lenov	, Lenc o logo			for selected parts <sup>3</sup> , 8 am - 5 pm, Mon - Fri coverage excluding holiday next business day response time) Onsite service upgrade options (in eligible locations): <sup>7</sup> 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 41C9192) 3-year LOR 24x7, 4 hour response (ThinkPlus part number 41C9193) 4-year LOR 9x5, Next Business Day				
	- Some: G	Genuine Professi Genuine Professi	Windo onal 32 Windo onal 64	ows® 7 2 ows 7 1	2GE Thir Mor Acc	kCentre e acces Guide i	0600 DDR3 e M90z Hei ssories on C in pdf <b>lenov</b>	ght Adjust 0-M90Z sh r <b>o.com</b> /ac	able S eet cesso	riesgu	uide					
	Preloaded some liste • Rescue • Passwor • ThinkVa • ThinkVa • Norton I • Microsof purchas • Corel® E • Corel D\	d) and Re rd Mana ntage S ntage F ntage T nternet ft Office e produ Burn.No	covery ager system cover No colbox Securi 2010 ct key w <sup>™</sup> (D)	Update Manager ity 2011 (30 preloaded; to activate VD±RW)	O-day)	er acces	ssories at <b>le</b>	enovo.con	n/acce	essori	es	• 4-yu (Th • 4-yu (Th  • Think lenov  Post v servic  24 ho during	ear LOF inkPlus   ear LOF inkPlus   inkPlus se o.com/t warrant ces avai	ay <sup>14</sup> toll-fr arranty pe	our responder 41C91 Inour responder 41C91 Inour responder arranty Inour responder ance	onse 95) oonse 96)

Proc Type-model esso		GHz Me	emory		screen splay	Camera (mega- pixel)		SATA disk	SA' opti		PCle Mini Card 802.11	Media reader	Intel vPro	Win7 preload	Global Educ	Avail date
0870-A3U i3-53 0870-A4U i5-65 0870-A6U i5-65	0 3		GBx2	23.0" F	Full HD Full HD Full HD	2.0M 2.0M 2.0M	Intel HD Intel HD Intel HD	320GB <sup>2</sup> 500GB 500GB	DVD	±RW	Intel 1000 Intel 1000 Intel 1000	) Media	vPro vPro		None	Jun 10 Jun 10 Dec 10
	•	These s	small a model	nd med s have	dium bus a 3-yea	iness (S r limited	llent cable i MB) models I warranty <sup>1</sup> ee 2010 Pro	s are part	of the			Program				
Positioning Processor	Int Int int an Int Int Tu	tel® Corel 64, Hegrated 4MB tel Corel 64, Herbo Book (T, integ	re™ i3 Hyper-T d 1333N cache e i5 Pro Hyper-T ost Tecl grated	Proces Threading MHz du or or ocesso Threading hnology 1333Mh	ng Techr Ial-chanr <b>or i5-650</b> ng Techr	530 with lology, Volet DDR3 with dual lology, zation Techannel	echnology,		gy,	<ul> <li>Bu</li> <li>22</li> <li>56</li> <li>25</li> <li>Ha</li> <li>Su</li> <li>To</li> <li>Fra</li> </ul>	In-One usiness bla "WX 4.5" 0mm WX 3.3 lb (11.5 andle in reaupport VES ol-less bacame stand	7" D X 17 116mm D kg) in ma ar A mount ck cover, c	X 443mn ximum co (100mm) disk, optica	nfiguratio	nemory	
Implementation Memory	2G		GB std	, 8GB r	max <sup>8</sup> , <b>PC</b>		1333MHz				① 3.5", ② slim,		no access access,		k (deskt ical (not	
Graphics  DP dongle Widescreen	Int (up on No 23	tel HD (o to 765 e Displa one .0" (584	Graphi 5MB <i>[2</i> ayPort <sup>1</sup> 4.2mm	cs in p GB mo ™ conn	rocessor dels] or a nector, su	, HDCP, 1759MB ipports o	DirectX® 10 [4GB mode dual indeper 1080) TFT ( tio, 1000:1 o	, uses ma ls]), ndent disp	in mer lay i-glare	,		-	T	H		
Multi-touch Camera	Su Ca dig	ork as si opports omera o gital MIC	tandalo Multi-to on top o C array	one mo ouch fu of scree with st	nitor via nction en, 2.0-m ereo, LE	VGA-in o egapixel D indica	connector , fixed focus tor, physica	s, integrate switch or	ed							
SATA disk SATA DVD±RW eSATA port Diskette drive Media reader	DV No No	'D burn one one	er, SAT	ΓΑ 1.5G	A 3.0Gb/ ab/s, 12.7 Media Ca	mm hig		om				Security • Security chip (see information left)				
Chipset		Side: two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)						Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis)								
Ports PCIe Mini Card Intel 1000	<i>Sic</i> Or						Boot sequence control     Boot without keyboard, mouse     Individual USB port disablement									
Bluetooth™ Ethernet Audio Speaker	No Or Hiç Tw	one ne gigat gh Defir ro interr	bit ethe	rnet po HD) Au	ort, Intel 8	32578DN Itek® AL						• EPEAT • ENERC	s ThinkVa ™ Gold ra SY STAR®	ating 5.0-com		gies
IEEE 1394 Intel AMT Modem	vP No	one Pro mod on-vPro one				e Manag	ement Tech	nology 6.0	) (Intel	AMT	Г 6.0)	• GREEN	ertified Ed NGUARD® compliant			
Security chip Keyboard	ST	Microe					Platform Monector), 104		,·				ar parts ar			
Mouse Power supply	Op	tical W	heel M	louse (l	JSB con	nector),	400 dpi, bla LUS® Bronz	ck, Lenov	o logo				national W omer Rep only (wit	laceable h limited	Unit (CI onsite	RU) service
- Some: Genuir Profes: - Some: Genuir Profes:	ne W siona ne W	indows al 32 indows	s® 7		2GE Mor Acc	e acces Guide ii	s 0600 DDR3 sories on On pdf lenoversories at le	-M90Z she <b>com</b> /acc	essor			Mon next → Onsi (in el	elected pa - Fri cover business te service ligible loca /ear LOR 9	rage excl day resp upgrade ations): <sup>7</sup>	uding h onse tir option	iolidays, ne) s
Preloaded appl • Rescue and F • Password Mai • ThinkVantage • ThinkVantage • ThinkVantage • Lenovo Messa • Norton™ Inter (30 days of vii • Adobe® Read • Adobe Flash® • Skype™ for W • Microsoft Offic	Recordinage Sys Pow Tool age ( net St rus d er® Play indo ce 20	very™` er tem Up ver Man lbox Center   Security lefinition ver ws 010 pre	odate nager Plus y 2011 ns)	·		or acces	SUITES AL IE	vo.com	<sub>1</sub> , accet	550116		(Ti • 3-y (Ti • 4-y (Ti • 4-y (Ti • Thini lenov Post servi	ninkPlus™ year LOR ; ininkPlus pa year LOR ; ininkPlus pa year LOR ; ininkPlus pa year LOR ; ininkPlus pa kPlus serv vo.com/thi warranty ices availa	part numbe 24x7, 4 ho art numbe 9x5, Next art numbe 9x5, 4 ho art numbe 24x7, 4 ho art numbe vices at nkplus/wa maintena	ber 41C; our resp er 41C91 Busine er 41C91 ur resp er 41C91 our resp er 41C91	9192) ponse 93) ss Day 94) ponse 95) ponse 96)
<ul><li>purchase prod</li><li>Corel® Burn.N</li><li>Corel DVD Mo</li></ul>	OWTN	¹ (ĎVD±	±RW)									durir	our x 7 day ng the war 00-426-73	ranty per		OIL

### ThinkCentre® M90z Accessories

4GB PC3-10600 DDR3 SODIMM

### Partial list of accessories supported on ThinkCentre M90z AIO

Memory		
1GB PC3-10600 DDR3 SODIMM	55Y3709	ann 03/02/10
1GB PC3-10600 DDR3 SODIMM (25Pack)	57Y4415	ann 03/02/10
2GB PC3-10600 DDR3 SODIMM `	55Y3710	ann 03/02/10
2GB PC3-10600 DDR3 SODIMM (25Pack)	57Y4416	ann 03/02/10

More information at

www.lenovo.com/support/desktopmemorycompatibility

Storage and removable storage 250GB SATA 3.0Gb/s Disk (7200 rpm) 500GB SATA 3.0Gb/s Disk (7200 rpm) 1TB SATA 3.0Gb/s Disk (7200 rpm)	41N3015 43R1990 45J7918	ann 01/24/06 ann 11/06/07 ann 08/19/08
USB 2.0 Portable 320GB Hard Disk USB 2.0 Portable 500GB Hard Disk USB 2.0 Portable Secure 160GB Hard Disk USB 2.0 Portable Secure 320GB Hard Disk eSATA/USB 2.0 Secure 500GB Hard Drive <sup>53</sup> USB 2.0 Portable DVD Burner <sup>53</sup> USB-only attach.	45K1689 45K1690 43R2018 43R2019 57Y4400 43N3264	ann 03/17/09 ann 05/26/09 ann 11/18/08 ann 11/18/08 ann 01/07/10 ann 01/05/10

#### Keyboard

Preferred Pro USB Keyboard 73P5220 ann 06/21/05 73P2620 Enhanced Performance USB Keyboard ann 03/23/04 Ultraslim Wireless Keyboard and Mouse<sup>52</sup> 57Y4700 ann 09/15/09 ThinkPad USB Keyboard with TrackPoint 55Y9003 ann 08/18/09 Lenovo® USB Fingerprint Keyboard 73P4730 ann 02/22/05 Lenovo USB Smartcard Keyboard 51J0155 ann 03/24/09 52 Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

#### Mouse

Lenovo Optical Mouse (USB)

Lenovo ScrollPoint® Mouse (USB, Optical)

Lenovo Laser Mouse (USB)

06P4069 ann 05/21/03
31P7405 ann 08/27/02
41U3074 ann 01/23/07

More information at www.lenovo.com/support/mice

#### Multimedia

ThinkPad® In-Ear Headphones 57Y4488 ann 01/07/10

### Security

Kensington® MicroSaver® Cable Lock<sup>56</sup>
Kensington Twin Head Cable Lock<sup>56</sup>
Lenovo Security Cable Lock

USB Gemplus GemPC Smart Card Reader
the work area, but it also prevents users from opening the chassis itself.

#### Stand

ThinkCentre M90z Height Adjustable Stand<sup>59</sup> 57Y4351 ann 05/04/10
ThinkCentre Extend Arm<sup>57</sup> 57Y4352 ann 07/06/10

<sup>57</sup> Compatible when ThinkCentre Extend Arm is desk (clamp) mounted only, wall mount is not supported.

59 Not compatible to Multi-touch models.

#### **Monitors**

55Y3711 ann 03/02/10

Lenovo D186 Wide 18.5" Monitor 2580AB1 ann 01/12/10 Lenovo L2230x Wide 21.5" Monitor 5453HB1 ann 06/10/10 ThinkVision® L1711p 17" Monitor 5047HB2 ann 10/20/09 ThinkVision L1900p 19" Monitor ThinkVision L1901p Wonitor ThinkVision L2250p Wide 22" Monitor ThinkVision L2251p Wide 22" Monitor ThinkVision L2251p Wide 22" Monitor 4431HE1 ann 11/11/08 2448HB6 ann 10/20/09 2572HB6 ann 10/20/09 2572HD6 ann 10/20/09 ThinkVision L2251x Wide 22" Monitor 2578HB6 ann 10/20/09 ThinkVision L2321x Wide 23" Monitor 4014HB6 ann 06/10/10 ThinkVision L2440p Wide 24" Monitor 4420HB2 ann 09/17/08 More information at www.lenovo.com/thinkvision

#### Monitor Accessories<sup>46</sup>

Lenovo USB-to-DVI Monitor Adapter
DisplayPort™ to Single-link DVI-D Cable
DisplayPort to VGA Monitor Cable
DisplayPort to VGA Monitor Cable
Kensington MicroSaver Cable Lock⁵6
Kensington Twin Head Cable Lock⁵6
Lenovo Security Cable Lock
ThinkCentre Extend Arm

45K5296 ann 05/12/09
45J7915 ann 08/05/08
73P2582 ann 12/29/03
45K1620 ann 09/30/06
57Y4393 ann 08/24/10
57Y4352 ann 07/06/10

More information at www.lenovo.com/support/monitoraccessories

For more information on desktop accessories, please visit: www.lenovo.com/support/accessories www.lenovo.com/support/desktopaccessories www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories





Lenovo ThinkCentre A70 Small and Lenovo ThinkCentre A70 Tower



Lenovo ThinkCentre A70 Small





Lenovo ThinkCentre A70 Tower



Lenovo ThinkCentre A70 Tower with Lenovo ThinkVision monitor



Lenovo ThinkCentre A70 Small with Lenovo ThinkVision monitor



Lenovo ThinkCentre A70 Small

nkCentre® A70 Small (7844) - TopSeller (Windows 7)							Personal Systems Reference (PSREF						
Name 1	Гуре-model	Slot x bay	Processor	GHz	L2 cache	Cores	Memory <sup>8</sup>	SATA disk	SATA optical	Graphics	Win7 preload	Global Educ	Avail date
A70	7844-D4U 7844-C1U 7844-B4U	4x2 4x2 4x2	Celeron E3300 Pentium E5500 Core 2 Duo E7500	2.50 2.80 2.93	1MB 2MB 3MB	2 2 2	1GB 2GB 2GB	320GB <sup>2</sup> 320GB 320GB	DVD DVD±RW DVD±RW	GMA GMA GMA	Pro 32 Pro 32 Pro 32	None None None	Aug 10 Aug 10 Aug 10
		• The	ese small and mediu ese models have a 1- ese systems are Micr	year lim	ited war	rranty	-		-	Program			
Processor  Intel® Celeron® Process 800MHz system bus, an Intel Pentium® Process 800MHz system bus, an Intel Core™ 2 Duo Proc 1066MHz system bus, a		Quality, reliability, and security for small/medium businesses Intel® Celeron® Processor E3300 with dual-core, 800MHz system bus, and 1MB L2 cache or Intel Pentium® Processor E5500 with dual-core,						S	Small		disk (in rear	optica	
		<b>Core</b> <sup>™</sup> <b>2 Duo Proce</b> s MHz system bus, and	2MB L2 cache or essor E7500 with dual-core, d 3MB L2 cache					Bay ① 5.25", 1 Bay ② 3.5", 1	" high, no	access, st			
Memor		1GB or 2GB std, 4GB ma non-parity, dual-channel ca			ix <sup>8</sup> , <b>PC3-8500 1066MHz DDR3</b> , apable, two 240-pin DIMM sockets; mory in one socket; one socket available				Slot 1: Low Profile, PCI Express x16 (45w max)  Slot 2: Low Profile, PCI Express x1 Slot 3: Low Profile, PCI Express x1 Slot 4: Low Profile, 32-bit PCI 2.3				

integrated graphics in G41, uses main memory (up to 253MB [1GB models], 765MB [2GB models]), • 18.7 lb (8.5 kg) in maximum configuration one analog VGA DB-15 connector, DirectX® 10 Highlighted optical drive button for easy access supports dual independent display with optional ADD2 adapter System floor stand for vertical orientation SATA disk 320GB, SATA 3.0Gb/s 7200 rpm, vibration dampening mounts Serial ATA, SATA 3.0Gb/s, integrated in ICH7 SATA controller Some: DVD-ROM DL SATA 1.5Gb/s 16-48X Max4 Drive SATA DVD SATA DVD±RW Some: Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive SATA cables Two SATA cables (each 1-drop to device), three SATA connectors on planar eSATA port None Diskette drive None None Media reader Intel G41 Express Chipset (PCI Express® x16). Chipset I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, PCI 2.3, USB, LPC bus) Front ports

Intel Graphics Media Accelerator X4500 (GMA X4500),

Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) Four USB 2.0, serial (9-pin), ethernet (RJ-45), monitor (VGA DB-15) Rear ports Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm) High Definition (HD) Audio, Realtek® ALC662 codec Rear audio ports Audio Speaker None IEEE 1394 None Gigabit ethernet on planar, Realtek® RTL8111DL Ethernet Intel AMT None Modem None Security chip None Lenovo Slim USB Keyboard (USB connector), black, Lenovo® logo Kevboard

180 watts, universal, manual switch

Supports ThinkVantage® technologies

RoHS-compliant

### Preloaded operating system<sup>20</sup>

Genuine Windows® 7 Professional 32

**Preloaded applications**<sup>5</sup> (only some listed)
• Rescue and Recovery<sup>™</sup>

- Password Manager

Mouse Power supply

Graphics

- ThinkVantage System Update ThinkVantage Power Manager
- ThinkVantage Toolbox
- Norton™ Internet Security 2011 (30 days of virus definitions)
- Àdobe® Reader®
- Adobe Flash® Player Skype™ for Windows
- Microsoft Office 2010 preloaded; purchase product key to activate Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

### Accessories

Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo

1GB PC3-8500 DDR3 UDIMM 45J5434 2GB PC3-8500 DDR3 UDIMM 45J5435 DVD-ROM DL SATA 1.5Gb/s 16-48X Max 41N5618 Super Multi-Burner DL DVD±RW SATA Drive 41N5620 DisplayPort™ to Single-link DVI-D Cable DisplayPort to VGA Monitor Cable 45J7915 57Y4393 ADD2 DVI-D Monitor Connection (HDCP 43R1985 NVIDIA® GeForce® 310 512MB (DP, VGA) 57Y4397 NVIDIA Quadro® 512MB FX 380 LP (DP,DVI) 57Y4396 More accessories on O-A70 sheet

Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories

# Security

- One lock to secure both cover and entire system to fixed object:

  - Padlock loop (in rear for opt padlock) Security slot (in rear for optional Kensington® Microsaver® cable)
- Power-on password

· Business black color; metal case

• 13.1" W X 14.5" D X 3.8" H • 333mm W X 368mm D X 97mm H

- Boot sequence control
- Serial port I/O control
- USB port disablement

### Limited Warranty<sup>1</sup>

- 1-year parts and labor
- International Warranty Service<sup>9</sup>
  Customer Replaceable Unit (CRU)
- parts only (with limited onsite service for selected parts3, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)
- Onsite service upgrade options (in eligible locations):
  - 1-year LOR 9x5, 4 hour response (ThinkPlus™ part number 45K5951) 2-year LOR 9x5, Next Business Day
  - (ThinkPlus part number 45K5949) 2-year LOR 9x5, 4 hour response
  - (ThinkPlus part number 45K5952) 3-year LOR 9x5, Next Business Day
  - (ThinkPlus part number 45K5950) 3-year LOR 9x5, 4 hour response
  - (ThinkPlus part number 45K5953)
- ThinkPlus services at lenovo.com/thinkplus/warrantv
- Post warranty maintenance services available
- 24 hour x 7 day14 toll-free support during the warranty period via 800-426-7378

	Slot x			L2			SATA	2nd Disk	SATA		Win7	Global	Avail
Name Type-model	bay	Processor	GHz	cache		Memory <sup>8</sup>	disk	Bay	optical	Graphics	preload	Educ	date
<b>A70</b> 7099-C2U <b>A70</b> 7099-B8U <b>A70</b> 7099-E6U <b>A70</b> 7099-E5U <b>A70</b> 7099-A5U	4x2 4x2 4x2		2.50 2.80 2.80 2.80 2.93	1MB 2MB 2MB 2MB 3MB	2 2 2 2 2	1GB 2GB <i>3GB</i> <i>4GB</i> 2GB	320GB <sup>2</sup> 320GB 320GB 500GB 320GB	None None None None None	DVD DVD±RW DVD±RW DVD±RW DVD±RW	GMA GMA GMA GMA GMA	Pro 32 Pro 32 Prem 32 Pro 64 Pro 32	None None None None	Aug 10 Aug 10 Aug 10 Aug 10 Aug 10
	<ul> <li>Th</li> </ul>	nese small and mediu nese models have a 1 nese systems are Mic	-year limi	ited wa	rranty <sup>1</sup>			-	er™ Progra	ım			
Positioning Processor	800N Intel 800N Intel	lity, reliability, and sec © Celeron® Processe MHz system bus, and Pentium® Processo MHz system bus, and Core™ 2 Duo Proce MHz system bus, an	or <b>É3300</b> 1MB L2 ( or <b>E5500</b> 2MB L2 ( essor <b>E7</b> 5	with decache of with ducache of the cache of	u <b>al-co</b> i or i <b>al-cor</b> or h <b>dual</b> -	re, e,	ses	• 6.3" W X • 160mm V • 23.1 lb ( • Non-slip	s black colo 14.0" D X W X 355mi 10.5 kg) in designed	15.4" H n D X 392 max confi nandle on	2mm H iguration	optica	al
Implementation Memory	1GB PC3- non- Italia		std, 4GB 3, apable, to mory in b	wo 240 oth soc	kets; n	o socket	s avail;	• Highligh easy acc	ted optical cess 25", 1.6" hi	on on top handle optical drive button for s			
Graphics	Intel Graphics Media Accelerator X4500 (GMA X4500), integrated graphics in G41, uses main memory (up to 253MB [1GB models], 765MB [2GB models], 1277MB [3GB models], or 1759MB [4GB models]), one analog VGA DB-15 connector, DirectX® 10,						s x16 (4 s x1 s x1	5w max)					
SATA disk SATA controller SATA DVD SATA DVD±RW SATA cables eSATA port Diskette drive	3200 Seria Som Som Two three	supports dual independent display with optional ADD2 adapter  320GB or 500GB, SATA 3.0Gb/s 7200 rpm, vibration dampening Serial ATA, SATA 3.0Gb/s, integrated in ICH7 Some: DVD-ROM DL SATA 1.5Gb/s 16-48X Max <sup>4</sup> Drive Some: Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive Two SATA cables (each 1-drop to device), three SATA connectors on planar None						ent - P - S K • Pov • Boo	Security     One lock to secure both cover and entire system to fixed object:     Padlock loop (in rear for opt padlock)     Security slot (in rear for optional Kensington® Microsaver® cable)     Power-on password     Boot sequence control     Serial port I/O control     USB port disablement				
Media reader Chipset	Intel	None  Intel G41 Express Chipset (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, PCI 2.3, USB, LPC bus)											
Front ports Rear ports Rear audio ports Audio Speaker IEEE 1394	Two Four Line	USB 2.0, microphone USB 2.0, serial (9-pi in (stereo, 3.5mm), li Definition (HD) Audio	e (stereo, n), etherr ne-out (st	3.5mm net (RJ- tereo, 3	), head -45), m 3.5mm)	dphone (sonitor (V), micropl	GA DB-15	) ´					
Ethernet Intel AMT Modem	None	Э	r, Realtek	® RTL8	3111DL	-				Supports ThinkVantage® technologies  RoHS-compliant			
Keyboard Mouse Power supply	Optio	e ovo Slim USB Keyboa cal Wheel Mouse (US watts, universal, man	B connec	ctor), 40	tor), bl	ack, Lendol	ovo® logo enovo logo			Lin	nited Warr	anty <sup>1</sup>	
Preloaded operating system <sup>20</sup> - Some: Genuine Windows® 7 Home Premium 32 - Some: Genuine Windows 7 Professional 32 - Some: Genuine Windows 7 Professional 64  Preloaded applications⁵ (all OSes; only some listed) • Rescue and Recovery™ • Password Manager • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)			Access 1GB PC 2GB PC DVD-RC Super N Displayl Displayl ADD2 D NVIDIA More ac Acc Gui	cories C3-8500 C3-8500 DM DL Multi-Bu Port <sup>™</sup> to Port to DVI-D M GeFo ccessor ide in p	DDR( SATA - Irner D o Singl VGA W Ionitor Irce® 3 ries on df Ienc	L DVD±F le-link D\ Ionitor Ca Connect 10 512M O-A70 s	I 16-48X Ma RW SATA I I-D Cable able ion (HDCF B (DP, VG/	Orive 41N56 45J79 57Y43 9) 43R19 A) 57Y43 esguide	⇒ In ⇒ Cr pa 335 118 20 15 93 85 97 • • • • • • • • • • • • • • • • • • •	ternational stomer Ray trts only (var selected on - Fri coext busine: service	day <sup>14</sup> toll-fr varranty pe	Unit (Ci I onsite m - 5 pm luding h bonse tile e option our respo er 45K59 our respo er 45K59 our respo er 45K59 arranty ance	RU) service didays, ne) s onse 5951) ss Day 149) onse 152) ss Day 50) onse 53)

### ThinkCentre® A70 Accessories

### Partial list of accessories supported on ThinkCentre A70

N	lei	m	oı	'v

1GB PC3-8500 DDR3 UDIMM	45J5434 ann 11/18/08
1GB PC3-8500 DDR3 UDIMM (25-Pack)	57Y4421 ann 11/10/09
2GB PC3-8500 DDR3 UDIMM	45J5435 <i>ann 11/18/08</i>
2GB PC3-8500 DDR3 UDIMM (25-Pack)	57Y4422 ann 11/10/09

More information at

www.lenovo.com/support/desktopmemorycompatibility

#### Ontical

#### Storage and removable storage

#### Graphics

Small 7844 support Low Profile:	
DisplayPort™ to Single-link DVI-D Cable 50	45J7915 ann 08/05/08
DisplayPort to VGA Monitor Cable <sup>50</sup>	57Y4393 ann 08/04/09
ADD2 DVI-D Monitor Connection (HDCP)	43R1985 ann 11/06/07
NVIDIA® Quadro® 512MB FX 380 LP	
(DP, DVI with a DVI to VGA converter)	57Y4396 ann 02/02/10
NVIDIA GeForce® 310 512MB (DP, VGA)	57Y4397 ann 02/02/10
NVIDIA GeForce 310 512MB DMS59	
(2-DVI or 2-VGA via DMS59 dongles)	57Y4167 ann 03/02/10

Tower 7099 support 75 watts max:

DisplayPort to Single-link DVI-D Cable<sup>50</sup>
DisplayPort to VGA Monitor Cable<sup>50</sup>
ADD2 DVI-D Monitor Connection (HDCP)
NVIDIA GeForce 310 512MB (DP, VGA)
NVIDIA GeForce 310 512MB DMS59

Source Attaches to the Think Centre compatible DisplayPort graphics card.

More information at www.lenovo.com/support/graphiccards

### Keyboard

Preferred Pro USB Keyboard	73P5220 ann 06/21/05
Enhanced Performance USB Keyboard	73P2620 ann 03/23/04
Ultraslim Wireless Keyboard and Mouse <sup>52</sup>	57Y4700 ann 09/15/09
ThinkPad USB Keyboard with TrackPoint	55Y9003 ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730 ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155 ann 03/24/09
52 Wireless via 2.4GHz technology using a micro	-size USB receiver.

More information at www.lenovo.com/support/keyboards

#### Mouse

Lenovo Optical Mouse (USB)	06P4069 ann 05/21/03
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405 ann 08/27/02
Lenovo Laser Mouse (USB)	41U3074 ann 01/23/07
Lenovo Wireless Laser Mouse - Black <sup>52</sup>	45K1696 ann 11/25/08
Lenovo Wireless Laser Mouse - Red/Black <sup>52</sup>	51J0198 <i>ann 11/25/08</i>

More information at www.lenovo.com/support/mice

### Multimedia

ThinkPad In-Ear Headphones<sup>60</sup> 57Y4488 *ann 01/07/10* 60 Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.

#### Modem

USB 2.0 Lenovo Modem 43R1814 ann 02/26/08

#### Security

Kensington® MicroSaver® Cable Lock<sup>56</sup>

Kensington Twin Head Cable Lock<sup>56</sup>
Lenovo Security Cable Lock

S73P2582

45K1620

45K1620

45K1620

409/30/08

57Y4303

400/24/10

USB Gemplus GemPC Smart Card Reader

56Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself

### **Monitors**

Lenovo D186 Wide 18.5" Monitor	2580AB1	ann 01/12/10
Lenovo L2230x Wide 21.5" Monitor	5453HB1	ann 06/10/10
ThinkVision® L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann 10/20/09
ThinkVision L2321x Wide 23" Monitor	4014HB6	ann 06/10/10
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann 09/17/08

More information at www.lenovo.com/thinkvision

#### Monitor Accessories<sup>46</sup>

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
ThinkVision USB Soundbar	40Y7616	ann 08/23/05
ThinkVision Soundbar	45K1263	ann 09/16/08
Kensington MicroSaver Cable Lock56	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock56	45K1620	ann 09/30/08
Lenovo Security Cable Lock	57Y4303	ann 08/24/10
ThinkCentre Extend Arm	57Y4352	ann 07/06/10

More information at www.lenovo.com/support/monitoraccessories

<sup>46</sup>Compatible on selected Lenovo and ThinkVision monitors.

For more information on desktop accessories, please visit: www.lenovo.com/support/accessories

www.lenovo.com/support/desktopaccessories www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories





Lenovo ThinkCentre A70z All-In-One (Wireless keyboard & mouse on selected models only)



Lenovo ThinkCentre A70z All-In-One



Lenovo ThinkCentre A70z All-In-One



Lenovo ThinkCentre A70z All-In-One



ThinkCentre A70z Performance Stand 57Y4277



ThinkCentre Extend Arm 57Y4352

Proc- Type-model essor	Widescreen GHz Memory display	Camera (mega- pixel)		SATA disk	SATA optical	Mini PCle 802.11 wireless	Keyboard /Mouse	ENERGY STAR 5.0	Win7 preload	Global Educ	Avail date
0401-A3U E5500 0401-D3U E5500 0401-B6U E5500 0401-R6U E5700 0401-B7U E7500	0 2.80 3GB 19.0" WXGA 0 2.80 4GB 19.0" WXGA 0 3.00 2GB 19.0" WXGA 0 2.93 2GB 19.0" WXGA 0 2.93 2GB 19.0" WXGA 0 2.93 4GB 19.0" WXGA	+ 1.3M + 1.3M + 1.3M + 1.3M + 1.3M + 1.3M + 1.3M	GMA X4500 GMA X4500 GMA X4500 GMA X4500 GMA X4500 GMA X4500	320GB 320GB 500GB 320GB 320GB 320GB 320GB	DVD±RV DVD±RV DVD±RV DVD±RV DVD±RV	V V 11b/g/n <sup>12</sup> V 11b/g/n V 11b/g/n V 11b/g/n V 11b/g/n V 11b/g/n	USB USB USB USB USB USB USB Wireless	ES50 ES50 ES50 ES50 ES50 ES50 ES50	Prem 32 Pro 32 Prem 32 Pro 32 Pro 64 Pro 32 Pro 64 Pro 64	None	Jun 10 Jun 10 Jun 10 Jun 10 Dec 10 Jun 10 Dec 10 Jun 10
	<ul> <li>These small and medi</li> <li>Best space saving soi</li> <li>These models have a</li> <li>These systems are Mic.</li> </ul>	ution & e 1-year lin	excellent cabl nited warrant	e manage y¹	ement	,	Seller™ Pr	ogram			
Positioning Processor	All-In-One PC for business Intel® Celeron® Processo 800MHz system bus, and Intel Pentium® Processo 800MHz system bus, and Intel Core™ 2 Duo Proces 1066MHz system bus, and Processor in LGA775 sock	r E3300 v IMB L2 ca E5500 o PMB L2 ca ssor E750 3MB L2	vith <b>dual-core</b> ache or r <b>E5700</b> with <b>c</b> ache or <b>00</b> with <b>dual-c</b>	lual-core	,	All-In-One  Business k  18.58" W )  472mm W  17.6 lb (8 l  Handle in  Support VI  Picture fra	X 2.87" D X 73mm l kg) in max rear ESA mour	X 14.0" H D X 356m timum con	m H Ifiguration		
Memory	1GB, 2GB, 3GB, or 4GB s PC3-8500 1066MHz DDR3 non-parity, dual-channel ca Italics: standard mem Non-italics: standard mem	B, ipable, tw ory in bot	o 240-pin DIM th sockets; no	sockets a	s; vailable	Bay ① 3.5", Bay ② slim,	1" high,	no access,	ess, std dis	,	
Graphics	Intel Graphics Media Accintegrated graphics in G41	elerator	X4500 (GMA	X4500),				ırity slot (i	n rear for ngton® Mic		
SATA disk SATA DVD±RW eSATA port Diskette drive Media reader	320GB or 500GB, SATA 3. DVD burner, SATA 1.5Gb/s None None None	0Gb/s, 3.	5" wide, 7200	rpm			<ul><li>Kens</li><li>Boot</li><li>Boot</li></ul>	sington loc sequence	ck also loc e control eyboard, r	ks chas	
Widescreen display Camera	19.0" (482.6mm) WXGA+ CCFL backlight, 300 nits, 1 Some: Camera on top of microphone (mono), LED i	6:10 asp screen, 1.	ect ratio, 1000	:1 contras	t ratio	ed					
Chipset	Intel G41 Express Chipse	t; I/O Co	ntroller Hub 7	(ICH7)							
Ports  Mini PCI Express 11b/g/n <sup>12</sup> Audio	Rear: Three USB 2.0, seri Side: Three USB 2.0, mic One Mini PCI Express slot Some: 11b/g/n wireless <sup>13</sup> , High Definition (HD) Audio	ophone ( Mini PCI CONEX	stereo, 3.5mm e adapter, Bro	ı), headph adcom® B	•	•					
Speaker IEEE 1394 Ethernet	Two internal speakers (2 w None Gigabit ethernet on planar,		RTI 8111DI				Suppo	rts Think\	/antage® to	echnolo	gies
Intel AMT Modem Security chip	None None None	rication	1112011122					GY STAR compliant	® 5.0-com <sub> </sub>	pliant	
Keyboard Mouse Power supply	Some: Ultraslim Wireless Some: Preferred Pro USI Ultraslim Wireless Some: Optical Wheel Mo 130 watts, autosensing, 85	3 Kéyboa Mouse (2 use (USB	rd`(USB), 104- 2.4GHz via US	key, black B receive	k, Lénovo er), 1000 d	⁵ logo dpi, black		ear parts a ernational stomer Re ts only (w	Warranty placeable ith limited	Service <sup>s</sup> Unit (CI I onsite s	RU) service
- Some: Genuin Profess - Some: Genuin Profess - Some: Genuin Profess Preloaded application of the some listed) - Rescue and Reaction of the some listed of the some	e Windows® 7 Premium 32 e Windows 7 sional 32 e Windows 7 sional 64 cations⁵ (all OSes; only ecovery™ System Update Power Manager Toolbox Data Backup tet Security 2011 (30-day) r® ndows e 2010 preloaded; uct key to activate	2GB PC3 ThinkCer More acc Acc Guid	ries 3-8500 DDR3 3-8500 DDR3 atre A70z Perficessories on C e in pdf lenov cessories at le	UDIMM ormance 5 0-A70Z sh r <b>o.com</b> /ac	eet cessories		Monex	n - Fri cov tt busines site servic eligible lo -year LOR ThinkPlus   -year LOR ThinkPlus   -year LOR ThinkPlus   -year LOR ThinkPlus   ovo.com/t st warrant vices avai	8 9x5, 4 ho Part num 19x5, Next 19x5, Next 19x5, Yex 19x5, Yex 19x5, Yex 19x5, 4 ho Part numbe 19x5, 4 ho Part	luding hoonse tire options tire options are options are 45K5 to Busine or 45K59 to Busine or 45K59 to Busine or 45K59 arranty ance	olidays, ne) s onse 1951) ss Day 49) onse 52) ss Day 50) onse 53)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Camera (mega- pixel)	Integrated graphics	SATA disk	SATA optical	Mini PCle 802.11 wireless	Keyboard /Mouse	ENERGY STAR 5.0	Win7 preload	Global Educ	Avail date
				19.0" WXGA+ 19.0" WXGA+						USB USB	ES50 ES50	Pro 32 Pro 64		Jun 10 Jun 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
   Best space saving solution & excellent cable management
   These models have a 3-year limited warranty¹
   These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	1066MHz system bus, and Processor in LGA775 soc	or E5500 with dual-core, 2MB L2 cache or essor E7500 with dual-core, d 3MB L2 cache ket	<ul><li>472mm W X</li><li>17.6 lb (8 kg</li><li>Handle in re</li></ul>	2.87" D X 14.0" H 73mm D X 356mm H ) in maximum configuration ar	
Memory	non-parity, dual-channel of <i>Italics:</i> standard mer	x <sup>8</sup> , <b>PC3-8500 1066MHz DDR3</b> , apable, two 240-pin DIMM sockets; nory in both sockets; no sockets available nory in one socket; one socket available	• Picture fram Bay ① 3.5",	SA mount (100mm) e style metallic stand (Tilt 10°-35°) 1" high, no access, std disk (desktop) .5" high, access, std optical (notebook)	
Graphics		celerator X4500 (GMA X4500), 1, uses main memory, DirectX® 10		Security	
SATA disk SATA DVD±RW eSATA port Diskette drive Media reader	320GB, SATA 3.0Gb/s, 3. DVD burner, SATA 1.5Gb/ None None None	5" wide, 7200 rpm s, 12.7mm high, fixed, not removable		Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis)     Boot sequence control     Boot without keyboard, mouse	
Widescreen display Camera	CCFL backlight, 300 nits,	(1440x900) TFT color, anti-glare, 16:10 aspect ratio, 1000:1 contrast ratio 1.3-megapixel, fixed focus, integrated indicator	USB port disablement tio		
Chipset	Intel G41 Express Chips	set; I/O Controller Hub 7 (ICH7)			
Ports Mini PCI Express 11b/g/n <sup>12</sup> Audio Speaker	Side: Three USB 2.0, mic One Mini PCI Express slo 11b/g/n wireless <sup>13</sup> , Mini Pci	Cle adapter, Broadcom® BCM43225 o, CONEXANT™ CX20582 codec	ereo, 3.5mm)	Supports ThinkVantage® technologies	
IÉEE 1394 Ethernet Intel AMT Modem Security chip	None Gigabit ethernet on plana None None None	r, Realtek® RTL8111DL		ENERGY STAR® 5.0-compliant RoHS-compliant  Limited Warranty¹	
Keyboard Mouse Power supply		ard (USB), 104-key, black, Lenovo® logo B connector), 400 dpi, black, Lenovo logo 5% PSU		<ul> <li>⇒ 3-year parts and labor</li> <li>⇒ International Warranty Service³</li> <li>⇒ Customer Replaceable Unit (CRU)</li> </ul>	
- Some: Genuir Profes  Preloaded appli some listed)  • Rescue and R  • ThinkVantage  • ThinkVantage  • ThinkVantage  • Lenovo Online  • Norton™ Intern  (30 days of vir  • Adobe® Reade  • Adobe Flash®  • Skype™ for Wi  • Microsoft Office  purchase prod  • Corel® Burn.N	ne Windows® 7 sional 32 ne Windows 7 sional 64 cations⁵ (all OSes; only ecovery™ System Update Power Manager Toolbox Data Backup net Security 2011 us definitions) er® Player ndows e 2010 preloaded; uct key to activate	Accessories  1GB PC3-8500 DDR3 UDIMM 2GB PC3-8500 DDR3 UDIMM ThinkCentre A70z Performance Stand More accessories on O-A70Z sheet Acc Guide in pdf lenovo.com/accessorie Other accessories at lenovo.com/acces		parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)  Onsite service upgrade options (in eligible locations):  ¹ 3-year LOR 9x5, 4 hour response (ThinkPlus™ part number 45K5955)  ¹ 3-year LOR 24x7, 4 hour response (ThinkPlus part number 45K5956)  ⁴ 4-year LOR 9x5, Next Business Day (ThinkPlus part number 45K5957)  ⁴ 4-year LOR 9x5, 4 hour response (ThinkPlus part number 45K5958)  ⁴ 4-year LOR 9x5, 4 hour response (ThinkPlus part number 45K5958)  † 4-year LOR 24x7, 4 hour response (ThinkPlus part number 45K5959)  ThinkPlus services at lenovo.com/thinkplus/warranty  Post warranty maintenance services available  24 hour x 7 day¹⁴ toll-free support during the warranty period¹ via 800-426-7378	

### ThinkCentre® A70z Accessories

### Partial list of accessories supported on ThinkCentre A70z AIO

#### Memory AIO 1165 use desktop memory:

1GB PC2-6400 DDR2 UDIMM 41U2977 ann 09/26/06 1GB PC2-6400 DDR2 UDIMM (25-Pack) 51J0549 ann 03/17/09 2GB PC2-6400 DDR2 UDIMM 41U2978 ann 01/08/08 2GB PC2-6400 DDR2 UDIMM (25-Pack) 51J0550 ann 03/17/09 AIO 0401/2565 use desktop memory: 1GB PC3-8500 DDR3 UDIMM 45J5434 ann 11/18/08 1GB PC3-8500 DDR3 UDIMM (25-Pack) 57Y4421 ann 11/10/09 2GB PC3-8500 DDR3 UDIMM 45J5435 ann 11/18/08 2GB PC3-8500 DDR3 UDIMM (25-Pack) 57Y4422 ann 11/10/09

More information at

www.lenovo.com/support/desktopmemorycompatibility

### Storage and removable storage

250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015 ann 01/24/06
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990 ann 11/06/07
USB 2.0 Portable 320GB Hard Disk	45K1689 ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690 ann 05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018 ann 11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019 ann 11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400 ann 01/07/10
USB 2.0 Portable DVD Burner	43N3264 ann 01/05/10

#### Keyboard

Preferred Pro USB Keyboard 73P5220 ann 06/21/05 Enhanced Performance USB Keyboard Ultraslim Wireless Keyboard and Mouse<sup>52</sup> 73P2620 ann 03/23/04 57Y4700 ann 09/15/09 ThinkPad USB Keyboard with TrackPoint 55Y9003 ann 08/18/09 Lenovo® USB Fingerprint Keyboard Lenovo USB Smartcard Keyboard 73P4730 ann 02/22/05 51J0155 ann 03/24/09 <sup>52</sup> Wireless via 2.4GHz technology using a micro-size USB receiver.

#### More information at www.lenovo.com/support/keyboards

Lenovo Optical Mouse (USB) 06P4069 ann 05/21/03 Lenovo ScrollPoint® Mouse (USB, Optical) 31P7405 ann 08/27/02 Lenovo Laser Mouse (USB) 41U3074 ann 01/23/07 Lenovo Wireless Laser Mouse - Black<sup>52</sup> 45K1696 ann 11/25/08 Lenovo Wireless Laser Mouse - Red/Black<sup>52</sup> 51J0198 ann 11/25/08

### More information at www.lenovo.com/support/mice

#### Multimedia

57Y4488 ann 01/07/10 ThinkPad® In-Ear Headphones

#### Security

Kensington® MicroSaver® Cable Lock56 73P2582 ann 12/29/03 Lenovo Security Cable Lock 57Y4303 ann 08/24/10 USB Gemplus GemPC Smart Card Reader 41N3040 ann 02/21/06 <sup>56</sup>Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis

### Stand

ThinkCentre A70z Performance Stand 57Y4277 ann 11/17/09 ThinkCentre Extend Arm 57Y4352 ann 07/06/10

### Monitor Accessories<sup>46</sup>

Lenovo USB-to-DVI Monitor Adapter 45K5296 ann 05/12/09 ann 12/29/03 Kensington MicroSaver Cable Lock56 73P2582 Lenovo Security Cable Lock 57Y4303 ann (

46 Compatible on selected Lenovo and ThinkVision monitors. ann 08/24/10

More information at www.lenovo.com/support/monitoraccessories

For more information on desktop accessories, please visit: www.lenovo.com/support/accessories www.lenovo.com/support/desktopaccessories www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

### ThinkCentre® - ThinkPlus™ Services

## Partial list of Lenovo® ThinkPlus Services<sup>7</sup> for ThinkCentre desktops

For more information see:

http://www.lenovo.com/services\_warranty/us/en/index.html

### ThinkPlus service upgrade options for ThinkCentre M series

### ThinkCentre desktop with 1-year Onsite warranty

LOR = Lenovo Onsite Repair

1-year LOR 9x5 4-hour response	41C9189
2-year LOR 9x5 Next Business Day	41C9187
2-year LOR 9x5 4-hour response	41C9190
3-year LOR 9x5 Next Business Day	41C9188
3-year LOR 9x5 4-hour response	41C9191

### ThinkCentre desktop with 3-year Onsite warranty

LOR = Lenovo Onsite Repair

3-year LOR 9x5 4-hour response	41C9192
3-year LOR 24x7 4-hour response	41C9193
4-year LOR 9x5 Next Business Day	41C9194
4-year LOR 9x5 4-hour response	41C9195
4-vear LOR 24x7 4-hour response	41C9196

### ThinkPlus service upgrade options for ThinkCentre A series

### ThinkCentre desktop with 1-year Onsite warranty

LOR = Lenovo Onsite Repair

1-year LOR 9x5 4-hour response	45K5951
2-year LOR 9x5 Next Business Day	45K5949
2-year LOR 9x5 4-hour response	45K5952
3-year LOR 9x5 Next Business Day	45K5950
3-year LOR 9x5 4-hour response	45K5953

### ThinkCentre desktop with 3-year Onsite warranty

LOR = Lenovo Onsite Repair

3-year LOR 9x5 4-hour response	45K5955
3-year LOR 24x7 4-hour response	45K5956
4-year LOR 9x5 Next Business Day	45K5957
4-year LOR 9x5 4-hour response	45K5958
4-year LOR 24x7 4-hour response	45K5959
5-year LOR 9x5 Next Business Day	45K5963

### **ThinkPlus Secure Business**

### Lenovo Online Data Backup

- Secure offsite data storage
- 256-bit Advanced Encryption System
- Data recovery or access in case of an unforeseen event
- Automatic, rémote management
- Choose which business critical data to back up

1-year Lenovo Online Data Backup - 1	<i>0GB</i> 51J0787
1-year Lenovo Online Data Backup - 2	<i>5GB</i> 51J0795

### **ThinkPlus Priority Support for enterprise customers**

- 9x5 next-business-day response Lenovo Onsite Repair
- 24x7 support with priority routing and advanced level technicians

### ThinkCentre desktop with 1-year Onsite warranty

3-year Priority Support 45J9087

### ThinkCentre desktop with 3-year Onsite warranty

3-year Priority Support	45J9088
4-year Priority Support	45J9089
5-year Priority Support	45J9090
3-year Priority Support 4-hour response	45J9091
4-year Priority Support 4-hour response	45J9092
5-year Priority Support 4-hour response	45J9093

**Availability:** All offers subject to availability. Lenovo reserves the right to alter product offerings and specifications at any time, without notice. Lenovo is not responsible for photographic or typographic errors.

**Warranty:** For a copy of applicable product warranties, write to: Warranty Information, P.O. Box 12195, RTP, NC, 27709, Attn: Dept ZPYA/B676. Lenovo makes no representation or warranty regarding third party products or services.

- Limited warranty: Support unrelated to a warranty issue may be subject to additional charges.
- <sup>2</sup> Hard drive: GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.
- 3 Limited onsite service systems are designed to be repaired during the applicable warranty period primarily with customer-replaceable parts provided by Lenovo. Lenovo will only send a technician onsite to perform a repair if (a) remote telephone diagnosis and/or customer part replacement are unable to resolve the problem, or (b) the part is one of the few designated by Lenovo for onsite replacement. For a list of onsite replaceable parts, contact Lenovo. In the United States call 1-800-426-7378. Support unrelated to a warranty issue may be subject to additional charges. Lenovo onsite repair (LOR), 8 am to 5 pm, Monday through Friday coverage excluding holidays, next business day (NBD) response time.
- 4 CD and DVD list maximum rates; rates are variable and are often less than the maximum.
- Included software may differ from its retail version (if available), and may not include user manuals or all program functionality. License agreements may apply.

- Multi-Burner Plus (part number 73P3305 or 73P3370) is a DVD±RW device that reads and writes to DVD-RAM, DVD-R, DVD-RW, DVD+R, and DVD+RW. It also reads and writes to CD-R and CD-RW media. 73P3370 also writes to DVD+R double layer media.
- ThinkPlus Services: These services are available for machines normally used for business, professional, or trade purposes, rather than personal, family, or household purposes. Not all machine types and models are covered. Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. Service levels are response time objectives and are not guarantees. If the machine problem turns out to be a Customer Replaceable Unit (CRU), a part will be express shipped to you for quick replacement. Onsite 24x7x2-hour service is not available in all locations. P&L means parts and labor. P/U means pick-up. See ThinkPlus terms and conditions for complete details and restrictions.
- 8 Memory: For PCs without a separate graphics card, memory supports both system and video. Accessible system memory may be up to 384MB less than the amount stated, depending on video mode.
- <sup>9</sup> International Warranty Service is available in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.

- 10 Modem speeds: Public network download speeds are limited to 53Kbps. Upload speeds are limited to 48Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require compatible phone line and server equipment. Check with your telephone and ISP service providers for availability.
- 11 For combination drives, maximum speeds only are given in the following order: CD read, CD write, CD re-write, DVD read.
- <sup>12</sup> The IEEE 802.11n specification (MIMO) has been finalized and is currently in IEEE 802.11n-2009 release. The maximum speed depends on the access point device and the number of integrated antenna used for connection. An adapter with 11a/b, 11a/b/g, 11b/g/n, or 11a/b/g/n can communicate on any of its supported formats.
- Wireless capability: Requires compatible wireless-enabled options sold separately.
- <sup>14</sup> Response times may vary. May exclude some holidays. Telephone support may be subject to additional charges.
- 15 Update Connector is available at no charge to registered customers during the limited warranty period. Line charges may apply.
- 16 Embedded Security Subsystem works with optional VPN software.

- <sup>18</sup> Embedded Security Subsystem may require download of client security software from the Web.
- <sup>19</sup> Asset ID allows system-specific information to be stored in a chip inside the system; it does not have any radio frequency support.
- Operating System: Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to lenovo.com/pc/support and enter your machine type and model number for more information.

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January 2011 tcbook.pdf